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Lumleian Lectures

ON

SOME POINTS IN THE NATURAL HISTORY OF PRIMITIVE DRY PLEURISIES.

Delivered before the Royal College of Physicians,

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LECTURE II.

Mr. President and Gentlemen,—A careful study of the cases related with more or less completeness in my first lecture leads naturally and necessarily to the second stage of this inquiry. A full understanding of the clinical demands a solution of the pathological problem; they are *inseparably connected, and find their common origin in* dynamic disturbances, which, although sometimes intangible, invisible, and incalculable, constitute the ultimate nature or essence of disease. What, then, is the nature of the visible pathological changes originating, underlying, maintaining, and continuing the symptoms and signs characteristic of *the course and issues of the cases* set forth as the grounds of this inquiry?

But before describing those changes as I have *observed* them in the course of my *examinations*, I must clear the way to the better understanding of them by some remarks on the minute anatomy of the lung, and *on the structural characters of a blood-clot* formed in freshly drawn blood.

Setting aside the earlier and in sundry ways admirable accounts of the minute anatomy of the lung given by Addison, Rainey, Rindfleisch, Schultze, Charcot, Luppey *Lefort*, and *Waters*, and confining our examination to the accounts *more recently* published *by such observers* as Schäfer and Klein, we shall learn from them the views received and adopted at the present time. Here is what Schäfer *says*:[1] "*After a certain stage* of subdivision, each bronchial tube reduced to a small *size is termed a lobular* or respiratory bronchial tube, and its walls become beset with *small hemispherical saccules* termed air-cells or alveoli. They occur at first only *here and there*, and confined to one side of the tube only, but at length almost cover it, *so that* the tube in a great measure loses its cylindrical character. At length *it ends in an enlarged* completely sacculated passage, termed the alveolar passage, *from which* are given off blind ramifications, somewhat enlarged towards their extremities, and everywhere closely beset with the air cells. These enlarged *terminations* are named *infundibula*." In order to give as exact an expression as *possible of* these views, he illustrates them by a diagram given at page 516 of the work already cited. From Klein's Atlas and from his more recent masterly little Handbook of Histology I extract the following account, which *on the whole is* the simplest, clearest, and most accurate of any hitherto published concerning the *minute anatomy* of the *pulmonary* parenchyma: "The small or intra-lobular bronchi are cylindrical tubes; they divide *dichotomously* into smaller tubes, and ultimately pass into the alveolar ducts, which *take* up on all sides of their circumference the lateral alveoli; the ultimate parts of the alveolar ducts are the *infundibula*, which take up the terminal alveoli. The alveoli are spherical or polyhedral *in* shape; and those belonging to the same alveolar duct or *infundibulum* are *separated* by much less tissue than the alveoli of adjacent *lobules*." *In the Handbook* (p. 220), it is further said that "all ducts or infundibula are closely *beset in their* whole extent with spherical, or being pressed against one *another* with polygonal, vesicles—the air cells or alveoli—opening by a wide aperture into the *alveolar* duct or infundibulum, but not communicating with each other. *The infundibula* are much wider than the terminal bronchiole, and also wider *than* the alveoli."

To Rainey and to both these distinguished observers is due the merit of having cleared away much of the confusion in which this intricate subject was until recently buried, of having discarded a complex, misleading, and useless terminology, and of having made it possible for persons not investigators or *experts to form a tolerably* accurate and clear conception of the anatomy of the pulmonary parenchyma and *of its relations to the larger air passages*. But even yet the reform is incomplete. It is not enough to have swept away as mere subjective expressions such *terms* as primitive and secondary lobules, lobulettes, air sacs, and the like. *Others supported by great authority remain*; and, whilst either having no correlative facts, or conveying inaccurate representations of those really existing, they suffice to keep obscure that which is simple, and to render barren or fertile only in error the application of anatomical facts to pathological *processes and* practical work.

Schäfer, for example, speaks of bronchia, bronchioles, or respiratory bronchial tubes, of their endings in enlarged *completely sacculated alveolar* passages, and of the giving off *from them of blind ramifications or infundibula enlarged* towards their extremities and everywhere closely beset with air cells. Elsewhere he says: "At the end of the respiratory *bronchioles, near the* passage of the infundibula, all the cells which line the wall *of the tube are of the non*-ciliated pavement variety. But the air cells themselves, both those which are scattered over the respiratory bronchioles *and those which cover the infundibula*, as well as intermediate portions of the *infundibula*, which *occur here* and there between the air cells, possess an epithelium of a peculiar character."

Now, in this quotation, even with the *help of the context*, it seems to me *impossible to find a clear, connected*, and exact account of the *terminal* air passages *and of* their relations to the *pulmonary* alveoli. And this impossibility, as I view it, lies less in any error committed by this distinguished anatomist than it does *in the multiplication of* distinctions, forgetfulness of the archetypal idea of a respiratory organ and the use of terms which *are at once* confusing and useless. There are two necessary—and, as it happens, they are the *only unerring*—guides to the complete and accurate understanding of the structure of an adult organ. The first is the study of its comparative history throughout the animal series; and the second is the study, from beginning to end, of the course *of its own development*. Investigated after this manner, the difficulties *encountered* in understanding the minute anatomy of the lung disappear; *and the relation* of the air passages to the alveoli become so clear and easy of apprehension *and expression*, that the use of many and complex terms is neither *necessary nor justifiable*. The primitive type of a lung is a cylindrical tube, *the sides and end of* which are portioned out by delicate membranous septa into shallow cubical *spaces, not communicating* with each other, but only with the common *lumen* of the tube round which they are arranged. If one will *imagine a corridor* with open cubicles fully occupying not only each side, but the *further end, the* floor, and the roof; if one will also imagine that no free *space is left between the cubicles*, that they *fully occupy* the sides, roof, floor, and end of the corridor, that they do not communicate with each other, except through the corridor around which they are arranged; that the *corridor imagined* is surrounded without loss *of space* on every side by corridors and *cubicles* similarly arranged; *that all these corridors* lead outwards to the exterior of the house of which they *form a part*; *that, as all these* corridors *run outwards*, they are joined by others without enlarging through the junction; and that at first the corridors are so short as *to have only* a single or double row of cubicles, whilst further outwards they have *three, four*, or even more,—*if you will imagine* all these things, you will be able to frame a sufficiently clear and *accurate conception* of the simple way in which the pulmonary alveoli are *connected* with the pulmonary air passages, and these with one another.

To describe the relation of the air *passages to* the alveoli in a more formal and literal manner, we may take a lobule as the *subject of description*. Each lobule, more or less conoidal in shape, *surrounded by areolar* tissue with all its usual contents, and penetrated at its smaller end by the *lobular* bronchus and by bloodvessels, lymphatics, and nerves, constitutes, as we know, a miniature lung. As soon as the terminal bronchus enters the lobules, *it divides* and subdivides with *increasing* rapidity and but small diminution of size, *until the dividing or branching* process is brought to an end at the *circumference* of the lobule. At its entrance into the lobule the lobular bronchus is but in the second and third divisions, which diminish in size, the walls are alveolated throughout, and the direction is constantly changing. In the terminal portions of the air tubes or passages which do not diminish in size the division is extremely rapid, and the end of each passage is formed by its abrupt closure just beyond a final division. It is this fact which, when a section of lung, including the pleura, is examined from the deep surface, has led to the notion that the terminal passages or tubes form dilatations or sacs at their blind extremities. Fortunately, sections and dissections parallel to the long axis of a passage demonstrate this notion to be incorrect. If this view of the relation of the air passages to the alveoli be accurate, and long study of the subject makes me somewhat confident about it, there is no need for a complex and copious terminology. It will be enough to speak of the lobular bronchus, of the intralobular bronchi or bronchioles, of the inter-alveolar passages and of the alveoli.

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[1] Quain's Anatomy, vol. ii., p. 514.

The alveoli are almost always spoken of as being hemispherical or vesicular; and their relation to the air passages is often illustrated by reference to a racemose gland or to a bunch of grapes. Both the description and the illustration are alike erroneous and misleading. It is true that under forced inflation, and as a result of injection and of other manipulations, the alveoli do exhibit occasionally a distantly hemispherical shape. But this is abnormal. Lying on the walls of the terminal passages, varying a good deal in size and somewhat in shape, but fairly uniform in depth, they can best be described in the main as irregular cubical spaces. A single layer of a honeycomb rolled into a cylindrical tube and closed at one end by another single layer, the cells of both looking inwards, would illustrate better than anything else that I can remember the relation of the alveoli to the inter-alveolar passages. By carefully inflating and drying a portion of lung, and examining sections of it made at varying angles to the pleura under an inch objective attached to a binocular microscope, the statements now advanced with respect to the relation of the alveoli to the inter-alveolar passages may be easily corrected or confirmed by any competent observer. These remarks on certain points in the minute anatomy of the lung have led me from the main subject of inquiry further than I intended or desired. I excuse myself on the ground that an accurate and adequate knowledge of this subject is essential to a just understanding not only of pathological processes, but also of those respiratory sounds which we employ in the diagnosis of disease.

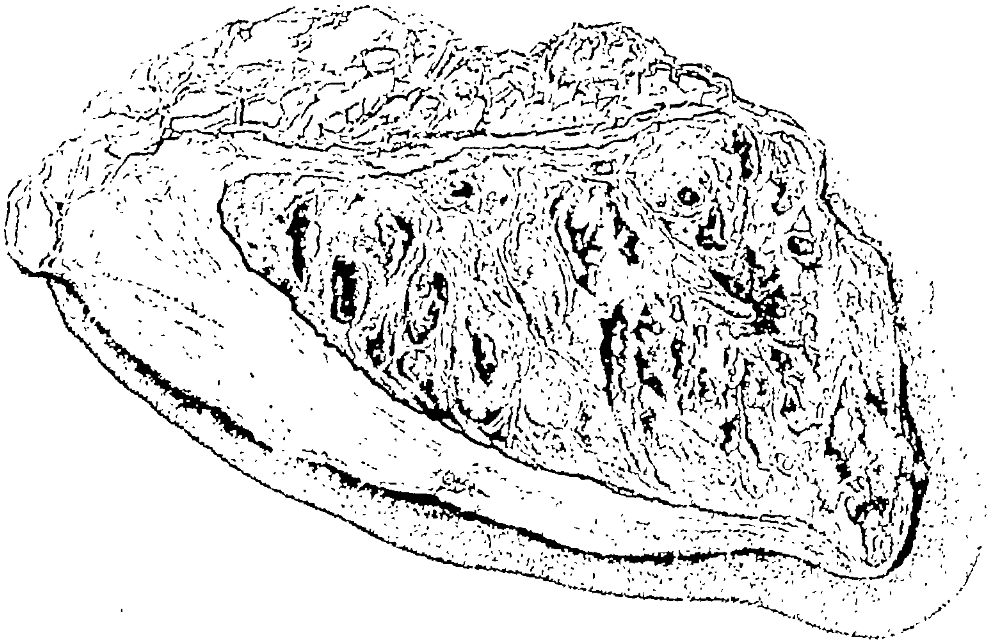
If a little freshly drawn blood is dropped upon a glass slide, permitted to clot, decolourised by gentle washing, and submitted to microscopic examination, three things and their mode of combination will arrest the attention of the observer: a basis substance arranged by wrinklings or foldings into varying sized areolæ, a faint and close network made up of minute molecular-looking fibres, and a small number of leucocytes. The fine fibrillar network will be seen to occupy the spaces enclosed by the areolæ of the basis substance. The leucocytes imprisoned in the basis substance, or in the fine fibrillar network, and undergoing some granular change, appear to be shooting out in all directions protoplasmic processes, and to be engaged in textural development. Examining such a specimen without any knowledge of its nature, it could be easily mistaken for a delicate glioma, and would be unhesitatingly received as a conclusive example of the development of fibrous tissue from leucocytes. But a further critical study of such a specimen will make it certain that no such development is taking place; that both the areolar basis substance and the fibrillar network are formed directly from the liquor sanguinis; that the leucocytes and their processes are in the way of degeneration; and that, whilst they and the fibrillar network will melt into a granular débris, the basis substance will remain unchanged.

I have related this experiment to show how easily one may be deceived by appearances when they run along the line of one's ideas, and how much care is needed in interpreting the changes which occur in recently exuded lymph. In this matter three structural elements are to be found: a fibroid basis substance, fibres, and cells. The latter are either migrated leucocytes or proliferating connective-tissue corpuscles; and it is held that from one or other, or both, the fibroid substance and the fibres are developed, and that the idea of the direct formation from an exudation of [illegible] fibroid tissue must be definitively abandoned. [illegible] the fibres formed in some kinds of lymph this [illegible]ubtless correct; but in respect of the fibres formed in at least one kind of lymph about to be mentioned no conclusive evidence has been adduced. In those exudations which consist of a fibroid basis substance and imperfectly formed white fibrous tissue, this theory cannot justly be maintained.

It is true that there are present in them leucocytes, and sometimes a few fusiform cells; but it is equally true that they do not exist in such numbers, nor show such changes of transition into fibroid materials as would warrant the inference of an exclusively causal relation between them. In such instances, as in the instance of the blood-clot, one may fairly hold that the fibroid elements have been directly formed out of the exudation, and that the cells present therein have taken at least no structural share in their development.

Leaving these collateral considerations, I proceed now to consider the chief forms of exudation produced in the course of primitive dry pleurisies. These exudations may be classed under three heads: the fibrinous, the croupous, and the proliferative.

The fibrinous exudation is characterised by the scantiness of its cell forms and its permanency; the croupous by the abundance of its cell forms and their rapid degeneration; and the proliferative by the abundance of its cell forms and the rapidity and variety of their structural developments. In no case does any one of these forms constitute the entire exudation; but in every case one variety predominates and determines the characters and the course of the changes which ensue. In its early stage the fibrinous exudation consists of membranes more or less extended and more or less thick, which can be detached from the pleura without apparent injury to its epithelial surface. This membrane is greyish, sometimes semi-transparent and elastic, but friable. It does not often adhere to the costal pleura, and it is more frequently found over the upper than over the under part of the lungs; indeed, its most frequent seat is around the summit of this organ. It is composed of a basis substance studded with moleculo-granular matter, shaped into rude areolæ or differentiated into bands of imperfectly formed fibrous tissue, and it contains embedded in it a few epithelial cells, some oat-shaped nuclei, and here and there a nucleated fusiform cell. Sometimes the exudation presents the appearance of an irregularly honeycombed or reticulated membrane, in the meshes of which there is found a yellowish, glutinous fluid, clotting on exposure to the air. In this fluid are found amorphous flakes, leucocytes, and red blood-discs. The structural constitution resembles that of the smooth membranous exudation; but it cannot be so easily removed from the pleura, and whereas the subpleural areolar tissue is in this instance congested, swollen, and infiltrated with a fluid containing many leucocytes, it is in the former instance apparently little if at all affected. At a later stage of its existence this fibrinous exudation becomes denser, harder, tougher, extends into the pleural matrix, and now, opaque and yellowish, cannot be detached without injury from the pleural surface. The subjacent pulmonary alveoli are for the most part little affected, but here and there their walls are thickened [illegible] without apparent proliferation, and their cavities contain a [illegible] fibroid substance, with epithelial cells and leucocytes embe[illegible]dded therein. At a later stage, however, when the fibrinous exu[illegible]dation invades the lung, further changes take place. This invasion, when it takes place, moves in the first instance along the lines of the interlobular fissures, and only at a later period steals along the bloodvessels into the alveoli. In well-marked cases three striking naked-eye changes slowly appear in the wake of this invasion. The interlobular areolar tissue of the affected part is converted into thickened and indurated bands, which, in some instances, contracting and compressing the lobules, give rise to the appearance, rather rare, of a true pulmonary cirrhosis. In the second place, portions more or less extended of the pulmonary parenchyma become solid, hard, tough, dark, and creak under the knife, which cuts them with difficulty. And in the third place, along the course of the fibroid invasion, adjoining the consolidations and at various parts of the summit and free margins of the lung, there are tracts or patches of vesicular emphysema. In the summit of a lung in which limited tubercular growths have undergone fibroid substitution, all these changes, thickened pleura, the fibrous bands, the small consolid and the emphysematous patches, will be found side b In addition to these changes, others less obvious wi found upon close examination. One of them is thick of the adventitia and intima of the pulmonary arterie



the growth from the intima of minute fibroid nodules, which sometimes fill the cavity of the vessel. Another change is thickening of the alveolar walls, with the development therein of free nuclei, not apparently engaged in tissue development. A third change is the appearance in the fibrous bands, chiefly at their intersections, of small fibrous nodules, which resemble and are considered to be true grey granulations or tubercles. But neither the structural characters of the nodules nor the history of the patients in whom they are found justifies this interpretation. They are composed of a fibroid basis substance, having embedded in it numbers, never large, of small free ovoidal nuclei, a few nuclear fibres, and rarely a little elastic tissue. Each consists of one mass, and not of several masses; it does not, as far as I know, contain giant cells; and it never undergoes the cheesy change. Akin to these little nodules, there are sometimes found in cases of long standing, where there have been repeated exudations, larger lumps or flattened masses of like characters connecting the visceral with the parietal pleura, and looking like growths, from which it is not always easy to distinguish them.

The pleura, once the subject of fibrinous exudation, is liable to fresh attacks of inflammation, and to the formation of new membranes, superimposed upon the old. These new layers, although resembling each other in structure, are never completely fused into one, and on section can be easily distinguished. Between the layers there are left spaces, of various sizes, filled with a glutinous fluid, containing epithelial cells, leucocytes, and a few fusiform nuclei. These spaces are coated with an *interrupted* epithelium, and distantly resemble lymphatic sacs. This is the form eventually assumed by the reticulated fibrinous exudation when it is permanent. When only a single thin layer of this fibrinous exudation exists, vessels are not found in it. Even when there are several layers, vascularisation, as compared with the proliferative exudation, is exceedingly scanty; and it seems probable that the development of new vessels takes place rather by channelling and differentiation than by development through the medium of protoplastic cells. Lastly, this form of exudation is characterised by the scantiness of its cell constituents, by the slowness of the changes occurring in it, by its persistence, by its freedom from complication with caseous consolidations and bronchial dilatations, by the lines which it follows in invading the lung, by the rarity of its disintegration thereon, and by the insignificance of its effects upon the general health.

The croupous, or, as it was originally named by me, the corpuscular exudation occurring in primitive dry pleurisies, differs in many ways from the fibrinous on the one side and the proliferative on the other. It occurs for the most part at the middle and lower parts of the lung; it is yellow, soft, thready, unplastic, and full of fluid, containing multitudes of degenerating cells, hyaline globules, blood-discs, amorphous flakes, fragments of granular fibres, granular débris, and countless micrococci. Sometimes, *without* the occurrence of pneumothorax, these accumulations escape by means of minute openings in the pleura, through the lung, and the patient recovers. A single exudation, examined more closely may be divided into three parts. The first is an opaque, yellowish, and friable membrane of varying thickness, incapable of detachment from the subjacent pleura, with which it is apparently organically incorporated. The second is a loose, open, soft, areolated pseudo-texture, infiltrated with fluid. The third, occupying the free surface of the exudation, consists of incohesive, soft, fringe-like processes, which often break on handling. There is seldom any strong adhesion between the costal and the pulmonary pleura. When the exudation is very abundant, and occupies a considerable space between the visceræ and parietal pleura, circumscribed portions of it are sometimes found broken down and occupied by a fluid resembling pus. For the most part this fluid is not pus—not a fluid holding in suspension spherical globules of uniform size, structure, and mode of response to reagents; but a fluid holding in suspension disintegrating leucocytes and epithelial cells, granule cells, and hyaline spheres, oat-shaped nuclei, and broken fusiform cells, fragments of fibres, and granular débris.

The lung adjacent to the inflamed pleura is always affected to varying depths and in different ways. All the alveoli are congested, and contain desquamated epithelium and leucocytes. A few, but in my experience always a few, groups of alveoli are found in a state of hepatisation. Larger and much more numerous groups of alveoli are in a state of caseous consolidation. In the subpleural areolar tissue, in the interlobular fissures, and occasionally at the entrance of the vessels into the apex of the lobule, small yellowish nodules are seen, and may be commonly traced to lymphatics, from the proliferation of which, or of their contents, the nodules appear to arise. They are composed of an adenoid reticulum and of areolæ of common fibrous tissue, in the meshes of which are found masses of lymph-corpuscles, free, rounded, or oval nuclei, nucleated fibres, and numerous multi-nucleated cells in a state of active endogenous proliferation. Resembling in some ways tubercular nodules, they are often declared to be tubercles.

A close examination of the outer surface of one of the earliest formed layers of exudation will sometimes bring to light the existence of two sorts of minute openings. The one are stomata, chalice-shaped cavities, with epithelial lips and linings leading into lymphatic spaces. The other are minute openings, the mouths of burrowing and sometimes branching tunnels, which occasionally can be followed into the pulmonary alveoli. It is not improbable that when a croupous exudation melts, it sometimes makes its way through these tunnels into the lung, and is thence discharged. In a case which I recently attended with Dr. Barnes and Mr. Merriman, a puerperal pleuritic croupous exudation led, by melting, to the formation of three small encysted empyemas. Paracentesis having been considered inexpedient, the pyoid collections were left to nature. After a week, in the neighbourhood of one of the sacs there was heard a coarse moist crepitation; a few days later the crepitation became a bubbling rhonchus; and shortly afterwards some ounces of a pyoid fluid, quite different from genuine pus, were expectorated. The same procession of events attended the emptying of each sac. Meanwhile there was no single sign of pneumothorax; and although the thoracic walls corresponding to the empyemas were bulged, there was no displacement of the heart or of other organs. The patient is now completely convalescent. Sometimes this pleuritic croupous exudation has a constitutional origin, and then the affection may be bilateral. With a low capacity for organisation, this exudation exerts at times a considerable influence for evil on the subjacent lung. The effect consists sometimes in disseminated caseous or lymphoid consolidations, sometimes in fibroid changes, and sometimes, although rarely, in small excavations or in bronchial dilatations. Basic lung disease akin to that described by Mitchell Bruce and others now and then arises in this manner. The tissues of this exudation are, in at least one respect, remarkable. When the case pursues a favourable course, the exudation is for the most part entirely absorbed, and I have once or twice learned from examination after death, that within a few months of an attack, every vestige of its presence has been removed. Now and then the fluid part of the exudation is absorbed, and the residue, becoming dry, undergoes caseation. In this condition calcareous plates and particles are occasionally deposited in it, and the patient becomes subject to obscure and often recurring attacks of pain.

The proliferative pleuritic exudations which I now proceed to describe are of more frequent occurrence than the other two, more varied in their course, and more enduring in their larger issues and effects. They are still further distinguished in their origin from fibrinous and croupous exudations; for whilst the latter are preceded by the phenomena of inflammation, and accompanied by an abundant fluid exudation, the former sometimes arise, increase, invade the lung, and undergo textural changes unaccompanied by any other phenomena except those belonging to a slow and simple textural growth. Indeed, this variety of proliferative exudation often passes almost imperceptibly into pleural new growths, and further on I shall have to advert to several cases of this kind. Beginning in the subpleural connective tissue, and accompanied from the first by active cell proliferation, this exudation passes through the pleural matrix in two ways. Accompanied, as is usually the case, with an abundant fluid plasma, the exudation reaches the pleural surface without apparent breach of continuity. Unaccompanied by any such fluid, proliferating cells arranged in pointed groups push their way through the pleural matrix, and, making breaches of continuity therein, reach the epithelial surface, spread rapidly thereon, and unite to form a continuous proliferating neo-membrane, which at various parts differs in aspect, consistence, and thickness. The even membranous form, however is not always maintained. Sometimes, when the masses of cells and fibres arfounded on concurrent clinical and pathological observations, we shall have to re-classify bacillary affections in such a manner that, whilst the bacillary supremacy remains acknowledged, the differentia giving them permanent and real, although subordinate, individualities shall be formulated and maintained.

The homoplastic are not, however, the only changes which occur in the exudations of primitive dry pleurisies. Metaplastic changes arise; and out of the simple structural elements of the proliferative exudation are developed such changes of form and of arrangement as constitute, within certain limits and conditions, fibrous, syphilitic, leprous, and other growths. But neither upon them nor upon the arger considerations which they suggest have I time at present to dwell. Reviewing the pathological changes brought about by primitive dry pleurisy, it becomes plain that they may be properly arranged as so many pathological entities in four divisions: the neoplastic pleuritic membranes, the fibroid lung, the bronchiectatic lung, and the fibroid phthisical lung. The complete and adequate understanding of these pathological changes is undoubtedly important, but it is not sufficient; for, although sometimes they are the direct results of injury coming from without, they are in the majority of instances the anatomical renderings or structural expressions of underlying states of system which are of the essence of the disease, and demand he first and chief attention. To these dynamic states we hould now naturally turn in order to learn how, by their ntegrations and disintegrations, their ceaseless groupings and shifting equilibria, they originate, maintain, transfigure, and end the varying structural forms which are the only visible manifestations of their presence. Such an inquiry, however, would lead us into the realms of speculative pathology, and leave out of sight the clinical uses of our anatomical study. To this humbler task let me proceed; and in trying to show that the pathological entities have corresponding clinical autonomies, let me endeavour to turn the knowledge of this relationship into use for the daily business of our lives.

Before proceeding with this task it may be useful to state more formally than I have done the position which, at present, the bacillary hypothesis seems to held in the scientific mind. In the first place, it is held that there is nothing autogenetically distinctive in the structure or form of a tubercle; that what alone makes a growth tubercular s the presence in it of the tubercular bacillus; that tubercular bacilli are present in all tubercular and scrofulous products which are thus in nature essentially identical; and that their absence, at some given time from such growths, s not a proof that the bacilli have never been present, but merely that they have been destroyed by some curative change in the tissues invaded by the parasites. In the second place, it is held that the inoculation of certain healthy animals with the tubercular bacilli is followed invariably by an eruption of acute general tuberculosis, and that the tubercles thus begotten, as well as their successors for generations, remain inoculable and virulent. In the third place, it is held that the inoculation of healthy animals with substances not containing tubercular bacilli are invariably infructive, or fructive only in products which are either sterile or beget only local effects. In the last place, it is held that the true and sole causal agent of tubercular, scrofulous, and allied diseases is the tubercular bacillus; and that the various forms which they assume, and the different courses which they follow under the irritative action of the bacilli, are accidental results due to local peculiarities of structure, the influence of external circumstances, and the constitutional tendencies of the invaded organism.

But whilst some of these contentions are proved, and some are probable, they are neither universally nor unconditionally accepted. There is a minority of persons, and I place myself among them, who contend that the exclusively causal agency of the bacillus, although extremely plausible, is not conclusively proved; that a greater number and variety of experiments of control are yet needed to satisfy a just scepticism; and that, even now, in the affections discussed, there must be admitted the existence of bacillary and of non-bacillary consolidations; and therefore of a bacillary and non-bacillary phthisis.[3]

At the present time, when men are still in the fervour of their conversion to the brilliant experimental discoveries of Koch, such protestations of a sober judgment will regarded as unpardonable sins, and punished with suita severity. Well, the sufferers under chastisement must co sole themselves with the reflection that it is only th whose judgments have been disturbed by emotion, or w have never sounded the deepest depths of knowledge, who have not passed through the perils of its subtl casuistries, that are exempt from difficulties, or doubts, fears; and that for the most part truth is won, not by th who rush impetuously forward in its pursuit, but by th who, with open and eager mind, are yet in patience conte to "labour and to wait."

Croonian Lectures

ON THE

HYGIENIC AND CLIMATIC TREATMENT O CHRONIC PULMONARY PHTHISIS.

Delivered at the Royal College of Physicians,

By HERMANN WEBER, M.D.,

PHYSICIAN TO THE GERMAN HOSPITAL.

LECTURE II.

Curative Treatment.—Relation of Doctor and Patient. 1. Diet: Defective Digestion; Raulin's Researches o Mineral Substances; Milk; Times of Meals; Cures o Phthisis; Alcohol.—2. Air and Ventilation; Open-ai Treatment; Defective Arrangements for the Treatmen of Phthisis in General Hospitals; Brompton and Ventno Hospitals; Necessity for numerous Small Hospitals fo Phthisis in the Country.—3. Exercise.—4. Managemen of the Skin; Clothing.

Mr. President and Gentlemen,—With regard to th curative treatment of phthisis, the main points which w ought to aim at are: improvement of the general nutritio of the body, or, to use Dr. Beale's expression, of the "bi plasm"; restoration of healthy respiration and circulation i the lungs; limitation of the existing disease; preventio of fresh outbreaks or fresh infection. The principal mean to obtain these ends are: adequate supply of food; abundance of pure air by night and day; regulated exercise strengthening of the skin; healthful occupation of th mind. We might perhaps say, in other words, that w must aim at improvement of the tissue change by increase supply of pure air and nutritive material to the cell and tissues, and by perfecting the elimination of used-u material; but we must, at the same time, keep off impur air from the diseased spots. I shall discuss the hygieni treatment under the following heads:—1. Food. 2. Air and ventilation. 3. Exercise and rest. 4. Bathing and management of the skin. 5. Climate.

Allow me, however, Sir, before I enter into these point to say a few words on the relation of the doctor to the consumptive patient. Shall the doctor frankly tell the latte that his disease is phthisis? It is still the opinion of many eminent medical men that we should, as a rule, not do s As long as phthisis was considered an incurable disease there may have been reason for such concealment, but now as we know, and can tell our patients, that phthisis is a curable disease, I think the patient ought to be informed of his condition, more or less according to the individuality; and as far as my experience goes this has a salutary effect. The patient is more ready to co-operate with the doctor and to bring the great and long-continued sacrifices, for h becomes aware of his own large share of responsibility. have already alluded to the circumstance that intelligenc on the part of the patient and his friends is a great hel towards recovery in phthisis, and that want of judgment o insight into the nature of the illness, and of the manifol dangers, and into the means of cure, renders the prognosis less hopeful, unless we are able to place the patient unde the strictest superintendence of a judicious doctor, or, still better, in a health establishment under the control of a resident medical man and his assistants, or into a well-arranged special hospital.

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[3] De La Phthisie Bacillaire, par le Professeur G. Sée, 1884.

1. *Diet.*—All those who have been successful in the treatment of phthisis have paid much attention to the question f food. Sir Risdon Bennett and many other physicians ave shown that by "feeding" alone great service can be one. If the popular idea were correct, that the appetite d digestion of consumptive patients are specially good, it ould be more easy to cure phthisis; but the rule is rather e reverse. The poorer the blood and nutrition of the cells d tissues, the greater therefore the want—the less is often eir desire for food. The appetite is not rarely capricious, d the digestion is apt to be disturbed. It happens also at patients object to the diet ordered, and it is therefore metimes necessary to tell them plainly that without their ordial and constant assistance in this matter they have no hance of recovery. At the same time, however, the fancies f the patient ought not to be disregarded. The food which e desires, if it is in any way permissible, ought to be proured for him. It ought to be as varied as possible, and he cooking and serving of meals ought to be nice. The xample of others is mostly very useful; and this one point in favour of special establishments and ealth-resorts for phthisis, as at Goerbersdorf, under Dr. rehmer and at Falkenstein under Dr. Dettweiter. I ave also seen at Davos and St. Moritz patients in mpany with other patients eat and drink, with regard quantity and quality, what they would never eat their own rooms alone, or with members of their amilies. Though it is impossible to lay down fixed rules or all cases, one rule is almost general—namely, that those uffering from consumption ought to take the amount of od required by frequent small meals, and not by only two rge meals, as in French, or three meals, as in German and wiss hotels. This is one of the reasons why ordinary otels are in general not adapted to the treatment of active hthisis. In addition to breakfast, lunch, and dinner, there ught to be four supplementary meals—namely, early in e morning, between breakfast and lunch, between lunch d dinner, and at bedtime. Before passing in review me of the principal articles of food, I wish to direct tention to the possibility that there may be important lations between the life of the tubercle bacillus and e quality of the food that we take, especially the saline aterials which enter into the composition of the blood, e cells, and tissues. A short time ago I had the pleasure listening to a suggestive lecture delivered by Dr. Vivian oore at the Society of Arts, in which he related the sults of most instructive researches by M. Raulin on e growth of the Aspergillus niger. A short account of ese researches is given in Dr. Duclaux's "Handbook on ermentation," prepared for the International Health Exhibition in 1884. After much trouble, Raulin found the folwing liquid the best nutritive medium of the aspergillus. is known as Raulin's liquid:—Water, 1500 grammes; sugar ndy, 70 grammes; tartaric acid, 4 grammes; nitrate of ammoia, 4 grammes; phosphate of ammonia, 0·6 gramme; carboate potassium, 0·6 gramme; carbonate magnesia, 0·4 gramme; ulphate of ammonia, 0·25 gramme; sulphate of zinc, 0·07 ramme; sulphate of iron, 0·07 gramme; silicate of potassium, 07 gramme. By sowing the spores on this fluid, two ops of aspergillus can be grown, which weigh together grammes; but if we prepare the fluid without the otassium, the gathering will dwindle to 1 gramme only; e crop has, therefore, fallen to $\frac{1}{25}$th of what it was. It ill fall to $\frac{1}{200}$th if the phosphoric acid, and to $\frac{1}{150}$th if the mmonia, be withdrawn. The withdrawal of the zinc would duce the crop to $\frac{1}{10}$th of what it was in the complete quid—in other words, would bring it down from 25 grammes o $2\frac{4}{10}$th grammes. Duclaux points out that the zinc—in veight only $\frac{1}{50000}$th of the fluid—increases the crop of the lant by 700 times its own weight; and he further states that, $\frac{1}{1600000}$th of nitrate of silver be added to the nutritive uid, the vegetation stops abruptly. We learn from this at microbes require mineral food in the same way as lants and animals do, and if we knew exactly which ineral substances the tubercle bacillus requires, and could, vithout harm to ourselves, deprive our blood and cells and issues of these salts, by abstaining from food containing them e should deprive the bacillus of the means of existence. he investigation of these matters, however, is very difficult. t is not easy to construct the best nutritive fluid for each icrobe. It can only be obtained by a series of methodical esearches. When the best artificial medium has been reated, it must be first ascertained that the result of the owing of the spores is always uniform, otherwise the result of the withdrawing of certain elements cannot be calculated. It is further evident that a study of agents impeding or destroying the growth may also become very important. With regard to the different articles of food, Dr. Bidder, of Berlin, points out from several papers by Dr. Bunge, of Dorpat, that the food of carnivorous animals contains a larger quantity of soda and smaller of potash than that of herbivorous animals, and he reminds us that carnivorous animals are on the whole less subject to tuberculosis than herbivorous animals. If it could be proved that the potash salts are more conducive to the growth of tubercle bacillus than soda salts, articles of food containing excessive properties of potash ought to be taken only sparingly.

Milk is regarded by the majority of medical men as one of the best articles of food in the treatment of phthisis. It contains all that is required by the body, and the mineral matters in the best proportion. It is less irritating than other nourishing kinds of food, and is more easily digested. There are differences in the quality of the milk of different animals, and also of the same animal, according to the food consumed by it, and other influences; but when merely speaking of milk we mean cow's milk. The dangerous substances which can be introduced by it, as the fever poisons and the tubercle bacillus from cows affected by the disease, and principally those with diseased udders, are, so far as we know, destroyed by boiling. We ought therefore, unless we are perfectly sure about the milk-supply, always to recommend the milk to be boiled. Patients often say that milk disagrees with them, but I have only rarely been able to acknowledge this statement as correct. In some cases where there is a tendency to diarrhœa or sickness, or acidity of the stomach, it is necessary to dilute it with from one-third to one-sixth of lime-water, which often exercises a soothing influence on the mucous membrane of the intestinal canal, and may, besides, help to bring on the cretaceous change in caseous deposits. In other cases, especially where there is constipation, the addition of Apollinaris or natural Selters, or Bilin water, is useful; in others that of barley water; in others, a small quantity of coffee, tea, or cocoa renders the milk palatable to persons who have a dislike to the taste of pure milk. In many instances the addition of rum or cognac promotes the digestibility of the milk, especially in persons accustomed to stimulating food, including much alcohol, but this addition ought to be made only under the guidance of the doctor. The quantity of milk suitable to different invalids varies very much, indeed, in the same person at different periods of the disease, and also according to the amount and quality of other food consumed. I generally advise from one and a half to three pints in twenty-four hours, but in many cases, especially those complicated with albuminuria, I restrict, sometimes for weeks, almost entirely to milk and milk food.

I dare not discuss other articles of food in the same way as I have done with milk. Everyone interested in dietetics will find valuable information in the works of Playfair, Frankland, Pavy, and Bauer.

About diet in general I will confine myself to some general rules. 1. To induce the individual to take as much nourishing food as his digestion permits, and to endeavour to increase the appetite and digestive powers by air and exercise, and sometimes by medicinal substances. 2. To give as much choice and variety as can be obtained. 3. To avoid articles of food, or of relish, of inferior nourishing value, if by these the appetite for more necessary articles is diminished, or the digestion of the latter is disturbed. Such articles are, for instance, acids, salads, and especially uncooked acid fruits, sugar, and pastries, a list which might be largely increased. Potatoes ought to be taken only in very moderate quantities. They contain much potash in proportion to soda, and experience shows that the exclusive, or even preponderating, use of potatoes favours scrofula.

I have mentioned before that in the majority of ordinary cases of phthisis, except the very chronic and arrested forms, it is better to take the desirable amount of food in frequent small meals than in two or three large ones. I am in the habit of recommending a plan of the following kind, with many modifications according to circumstances:—At seven o'clock or earlier, while still in bed, a cup of milk by itself, or with a dessert- or tablespoonful of cognac, or with lime-water, or with a small quantity of tea or cocoa and a small piece of bread-and-butter. At half-past eight or nine, after dressing, breakfast of milk, with some slightly stimulating addition, as tea, coffee, or cocoa; bread-and-butter, or bacon, ham, or fish. At eleven, a tumblerful of milk or koumiss, or sometimes a cup of broth or beef-tea, or a sandwich and a glass of wine. At one or half-past one, a substantial meal of meat, or poultry, or fish, or game, with fresh vegetables, some light pudding or cooked fruit, and a glass of wine. At four o'clock, a glass of milk or koumiss, or a cup of tea or coffee with much milk, and some bread-and-butter or plain biscuits. At seven another substantial meal similar to that in the middle of the day. At half-past nine or ten, on going to bed, a cup of milk, or bread-and-milk, or milk with some farinaceous food, as Hart's, Liebig's, Nestlé's, or Mellin's. At this time, if there are night sweats, the addition of a tablespoonful of brandy is very useful.

In cases of considerable pyrexia it would be injudicious and impossible to give as much solid food as in chronic non-febrile or nearly non-febrile cases, but it is necessary to give as much easily digestible food as the patient can digest. Our aim ought to be somewhat to check the waste, and to replace by food the increased waste. Here alcohol is of great use. Milk is often not digested in its natural state, but it must be tried peptonised and diluted with pure water, aerated water, or, still better, with barley-water or thin gruel. Chicken broth, veal broth, beef-tea, and gelatinous substances are in these conditions most useful; while in health, and in the non-febrile consumptive cases, they ought not to take the place of the more solid proteinaceous substances. In most cases of phthisis it is desirable to introduce into the system a fair amount of fat, and this can often be done better in the shape of bacon, fresh butter, and milk and suet, than in the form of cod-liver oil, though the latter, too, is most useful. There are some popular "cures" of phthisis into which milk or different kinds of fat, assisted by open air, enter largely. You all know the milk cure in the various mountain districts, from the time of the Romans to the present day; the koumiss cure in Tartary. I remember also the buttermilk cure in some German villages, and have often heard that in the American prairies consumptive patients are cured by consuming large quantities of the bone marrow of the buffalo. Many years ago, when assistant at a clinic at Bonn, two of my poor consumptive patients left me to be cured in a neighbouring village by taking three times a day or more frequently a large plateful of a kind of porridge prepared of dog's fat and rye meal, and certainly their improvement was most remarkable. But they had exchanged at the same time their in-door town work for out-door country work. All these cures have two points in common: first, food rich in fat and proteinaceous matter; and, secondly, out-door life.

I cannot close the chapter on food without entering into the debated question of alcohol. Much as I am convinced that in health alcohol is rarely necessary, in phthisis, especially in the febrile stages, experience has convinced me of its great usefulness in the majority of cases so long as the kidneys are sound. It acts as respiratory food (Binz) and limits the waste of tissue. Brehmer, Spengler, Unger, Rüdi, Volland, and Dettweiler use it largely; Austin Flint, too, is a strong advocate for its use. The quantity and quality required vary very much in different cases. In some cases as much as a bottle, and even three pints, of moderately strong wine, or ten to twelve ounces of cognac or whisky, are taken in twenty-four hours with advantage; in others scarcely one-sixth of this amount; and, again, in others alcohol must be altogether avoided. Alcoholic drinks seem to be specially useful in those cases where a pretty large quantity can be taken without unpleasant excitement or headache; but where, on the contrary, a sense of comfort and increased strength is produced by them, where appetite and digestion are improved, flatulence and indigestion removed, and pyrexia, where it exists, is diminished. Where, on the other hand, they cause throbbing in the arteries, headache, listlessness, flushing, or great excitement, or loss of appetite for ordinary food, they are either unsuitable or can only be taken in small quantities. The doctor must decide by careful examinations whether, and in what quantity, alcoholic drinks are to be given. The quality, too, cannot always be known without trial. In Germany and Austria the stronger Hungarian wines are much liked; in the Alps the red wines of the Valteline; but Madeira, Marsala sherry, Burgundy, good claret, and some pure Italian and Greek wines are likewise useful in many cases, and not rarely beer; cognac and whisky suitably diluted are of great value in cases of weakness. Very often Dr. Dettweiler's plan, to give the amount of alcohol required in very frequent and small doses, is of great practical value.

2. *Air and Ventilation.*—Although it is generally acknowledged that impure air is the foremost cause of phthisis, and although Dr. Henry Mac Cormac, Dr. B. W. Richardson, and others have preached not only this, but also that pure air is the most important means of cure, yet we must all confess that in practice the first principles of air treatment are, with rare exceptions, most imperfectly carried out. Wherever climate permits an entirely open air and tent life is the best help in the treatment of phthisis; but this is not easily practicable the whole year round in our climates, although much might be done in this direction. Fears of the inclemency of the weather are far too great amongst the public as well as the profession. Patients affected with chronic consumption, without or with only moderate and partial pyrexia, ought to spend the greater part of most days in the open air, and ought not to be deterred by a little rain, or mud, or low temperature, or by the fact that they begin to cough when they come out of the close house into the open air. Arrangements ought to be made by which invalids are enabled, warmly dressed, to sit in the open air, sheltered from wind and rain. It is here where the degree of intelligence of the patient forms an all-important element in the chances of success. It is necessary, as I have already stated, to give the patient and his friends an idea of the nature of the illness and the means of cure, and to obtain their intelligent, courageous, and persevering co-operation. The patient must see that though it is more difficult to carry out the open air principles in an inclement climate, that it is yet infinitely more injurious to him to shut himself up in close rooms than to use every possible moment of even an indifferent day to walk or sit in the open air. The improvement of the appetite, the digestion, and the strength, the diminution of night sweats, of restlessness, and mental depression, are in most instances so marked that the invali after some time begins to have confidence, and to feel tha his life is rendered more bearable even if no cure ca be effected. We must always bear in mind that ev in the midst of large towns the air in open places, a even in the streets, is very much purer than within t houses. The researches of Angus Smith, Pettenkofer, a others have shown this with regard to the proporti of oxygen and carbonic acid and other impurities; a those of Miguel with regard to the number of microb in the air at Paris manifest this in a most strikin manner. Their proportion within the wards of t Hôtel Dieu and of the Notre Dame de la Pitié being mu larger than in the Rue Rivoli. As, however, the great part of the twenty-four hours is spent in-doors the arrangements of the house and of the rooms are of the greate importance. The invalid ought to have sunny room sitting- as well as bed-room, for, though the sun does no shine at night, the vivifying influence which it exercises o the air of the bed-room during the day does not disappea at once with the cessation of the sunshine, but las through the night and longer; 2000 cubic feet per head not too much space for each inmate, and by good ventilation the air ought to be frequently renewed by day and night. The temperature ought, if possible, never to excee 62° F.; and the open fire is by far the best producer of artificial warmth; gas ought to be entirely excluded. The be ought to be open on all sides, and the ordinary consumpti invalid ought not to be longer than eight or nine hours bed, even if the body temperature is somewhat raised durin some hours of the day. It is a horrible custom to keep suc invalids during the greater part of the day in bed unless th weakness be extreme. In all diseases it would be a usef subject of discussion when a patient is to be in bed an when not; when he is to take exercise and when to sit o lie still. But in phthisis the long stay in bed, and particularly in the bed-room, is certainly injurious; breathin ventilation of the lungs, circulation, appetite, tissue chang almost everything is unfavourably influenced. In acut forms and stages of phthisis, when there is much feve I do not advise the patient to take active exercise, o to fatigue himself by sitting up during any length o time; but it is certain that pure and fresh air is a necessary, and even more so, than during the non-febril stages. The bed of the patient ought therefore to placed that he receives as much open air as possible withou exposure to actual wind or draught. In summer, and also i winter, weather permitting, a couch or bed ought to be place on a balcony or terrace, or in an open field or garden; th patient ought to be carried to it and properly covered, la there from morning to night, or as long as possible. Som

of my patients have spent during weeks, or even months, a great part of the day in hammocks slung up between trees, with great advantage. The change from the ordinary bed treatment in a close room to this open air couch or hammock treatment is an infinite gain to the patient who breathes more, eats better, is more cheerful, sleeps more soundly, and is less troubled with perspiration. The pyrexia, likewise, often rapidly decreases. I shrink at present from touching the open-air treatment of the poor at their homes, except so *far as they likewise* should be taught to be as much as possible in the open air, and to sleep with open windows; and I may add that I have seen many instances where a change to open-air occupation in all weathers, from indoor work in close workshops or bakehouses, has led to an arrest of disease and recovery. I must enter, however, a little more fully into the treatment of poor consumptive patients in our general *hospitals situated in large towns. There they* have usually only between 800 and 1200 cubic feet of air per head, with ventilation through open windows, which cannot be efficiently carried out without *draught, and is in winter* often sadly neglected. The majority of these patients, even if here *is only moderate* and partial pyrexia, spend the whole, by far the greater, part of every day in bed, which, as I ave already said, ought not to be, excepting in acute cases, stages, or in excessive *weakness; but if, after the subsi-* nce of the pyrexia, they are out of bed standing, or sitting, *walking about in the* wards, they are exposed to draughts, d frequently contract fresh attacks of bronchitis or eurisy, or other illnesses due to chill, and thus take rther steps in their *downward course. Although I have* ways been fond of hospital work, these considerations ave for a long time been a source of worry to me whenever stood at the bedside of my consumptive patients, and in spair I have more than once said that they were in the orst place in the world; and yet the hospital to which I attached stands on an open spot at Dalston, and has all plots of ground attached to it where convalescents sit and walk, while the hospitals in the *interior of* ndon *are* mostly deprived of this advantage. This is, leed, *a subject,* gentlemen, which deserves your serious ught, and I earnestly entreat you, if you agree with me, enlighten the public and to use your influence to procure er accommodation for the treatment of the consumptive ents of the poorer classes. I know that many medical , and perhaps *some* of those whom I have the honour of essing, are not in favour of special hospitals. If the eral hospitals are well arranged for the *treatment* of isis, and situated in good air, *some of my objections* fall e ground, but these favourable conditions are rarely met . Very much better are the arrangements in the Brompton ital for Consumption, especially in the new building, I had the advantage of seeing quite recently with heodore Williams. Each of the three floors devoted to tients consists of a corridor *10 ft. in width,* a large al dining-room, ten wards 13½ ft. high, holding from eight beds—forty-six in all. The average floor space d is 115 ft., the cubic space being 1400 ft. The ventiis maintained independently of the windows and fire-, and supplies 4000 cubic feet per hour to each patient. ir is admitted by numerous openings placed on a level different floors—on the east and north into the gal-, on the west and south into the wards, the greater n being heated by passing over coils of hot-water ; a part is admitted directly. The quantity of hot old air can be modified at will, and the temperature able of being evenly maintained. The foul air is off from the corridors, wards, &c., through extracting built in the walls, and furnished with *openings* at floor eiling. These flues run into large air ducts beneath the which communicate with *four* towers heated by steam forming the exhausting chambers. With these arrange-s *it is possible for patients* to walk about in the corri- or to sit in the central hall and converse with *one* er without being exposed to draughts and chills. It a great pleasure to *see almost all the* patients out of

The drawbacks unavoidable with the situation in lon, especially with *the east* and north-east winds, are rdinary contamination of the air and the *occasional* and the *fair results* obtained show how much good can ne by judicious treatment and arrangement *in* spite of a grave natural defect.

initely more advantage*ous is the* situation of the onal Hospital for Consumption at Ventnor, with which e been *acquainted* for many years past, and which I have lately again visited, under the guidance of Drs. Coghill and Robertson. The Undercliff is so well known to you that I need not give a description of the delightful and healthy situation. The peculiarities of the arrangement are, you know, that the whole hospital is built in blocks for twelve patients each, that each patient has a separate sleeping room of from 1500 to 1750 cubic feet, and in the newest block 2000; that each six patients have a separate sitting-room, *3000 cubic feet space*, and each block (twelve patients) has an additional room in which breakfast, tea, and supper are served, of 3000 cubic feet; that male and female patients *dine separately in large rooms* at the end of the blocks. There are various arrangements for the renewal of air, which, though they would be regarded as satisfactory in *other hospitals*, have not appeared so to the authorities of the institution, so that in the new block, on Dr. De *Chaumont's recommendation*, a supply of 5000 cubic feet of fresh air per head per hour has been adopted, and the fresh air is to be delivered at a temperature of 62° F. *Dr. Hassall has rendered a great service* to the public and the profession by originating the foundation of this hospital. Between the hospital and the sea there is a large piece of open ground for exercise and sitting in the *open air.* The diet of the patients is well arranged; the results of the *treatment are satisfactory*, and the patients are mostly very happy during their stay. What I should like to add are terraces and balconies, on which light beds or couches could be placed for *febrile patients to lie on, and thus to enjoy* the open air; and, further, large verandahs, glass covered, *and with* movable glass doors to be opened and closed at will, so that patients might sit and walk there during wet and windy weather. Further useful additions would be seats with *shelter overhead and on three sides, turnable so* that the shelter might be turned against the wind, and the patients sit there with the whole front open, even in rain and windy weather. I should *also* be *inclined to erect in* suitable places walls with reflecting surfaces, to serve as *shelter* from wind and as *reflectors of the sun's warming* rays. Hammocks would be at times likewise a comfort.

There *are, also, small sanitaria* for consumptive patients at Bournemouth and *Torquay; but the number of beds added* together is almost infinitesimal compared with the number of consumptive patients belonging to the poorer classes. *If* there were a hundred of such hospitals they would *be a fair* instalment of what is required to meet the most necessary wants. I should not recommend large hospitals, but small *ones,* for 80 or 100 beds, with from *one to three* or four patients in each room; with balconies to hold one bed, so that one febrile patient could be moved into the open air, and more than one such ought never to be in the room. There should be *large verandahs for exercise and sitting* in wet and windy weather, shady and sunny seats, seats such as roughly sketched above, with turnable shelter to be used in windy and wet weather; and in other respects *arrangements* similar to those at Ventnor and Brompton. Each hospital ought to have a resident medical officer, and there ought to be ample *room for exercise on level as well* as on rising ground; the neighbourhood of a pine forest would be a farther advantage. They ought to be in the *country or at the seaside,* on account of the greater purity of the air. Even in the suburbs the air is *much purer than* in the interior of towns; thus Miguel found in ten cubic *inches* of *the air* of Montsouri (a suburb of Paris) 7600 microbes; in the Rue Rivoli (in the centre of Paris) 55,000; and a still *much larger* number, as already stated, in the hospital wards, especially in the winter. It would not be difficult to find fairly suitable localities. Surrey, Kent, Berkshire, and Hampshire *have* good sites. On the southern slopes of their pine-clad hills—for instance, between Leith-hill *and* Ewhurst *Windmill*, between East Grinstead, Frant, Wadhurst, and Ticehurst; between Ripley and Cobham; on the Chobham ridges; between Farnborough, Minley, Bramshill Park and Eversley; *near Haslemere, on the* slopes of Black Down and Hind Head. The southern coast and also the south-eastern *offer fair localities,* if care is taken in the selection of the spot with regard to shelter, dryness of soil, *and exercise ground. The* Undercliff, for instance, and the neighbourhood of Bournemouth still possess some not yet overcrowded sites; also Torquay, Sidmouth, Lyme Regis, Dawlish, Hastings, and perhaps Sandgate; on the coast of North Devon and Cornwall and near Llandudno and in Bute good spots could be found. I know, gentlemen, that small hospitals for consumption such as I have suggested are *expensive,* and *that* it would be difficult to find the money, but if you are convinced of the advantage to the patients, and will use your influence, donations and legacies will come in, and in the course of time we shall take a step in the right direction.

3. *Exercise.*—Exercise is one of the most powerful and essential means of cure. It is as necessary as air and food, because it enables the invalid to take both in a sufficient quantity to improve the nutrition by taking up fresh material and removing the waste, and thus to fight a battle with a fair chance of success. Without exercise I should not like to treat phthisis. To take exercise properly requires, however, the guiding hand of the physician; there are judicious persons who can be taught to become sufficiently acquainted with their entire condition and their surroundings to enable them to do neither too much nor too little, but such persons are rare amongst consumptive invalids. In many of them the nutrition of the brain has suffered as much as that of the stomach and lungs and other systems, and their judgment with regard to their own state and their wants is impaired. We ought, therefore, to bear in mind that by far the majority of those suffering from phthisis require constantly to be held by "leading reins," and must be told what kind of exercise to take, how much, and at what times; walking on level, climbing gently, and with measured increase as to duration and steepness. Riding on horseback, skating, and tobogganing are all useful *exercises under guidance, but over-exertion ought to be* carefully avoided, and one mistake often destroys the fruit of months and years of judicious management. Up to a certain point the sense of fatigue is a guide, but not always, for some persons feel fatigue at the beginning of a walk and improve while taking it, and others never acknowledge to themselves the sense of fatigue. The medical man alone can measure the amount of strength, and how it can be maintained and increased by gradually increasing exercise. Climbing is especially useful, as it brings the whole systems of circulation and respiration into play, and leads to expansion of the lungs and thorax and strengthening of the respiratory muscles. Regulated climbing for a course of weeks and months in suitable cases has a wonderful effect on every organ and function of the body; not only respiration and circulation, but the digestion, the action of the skin, sleep, mental power, resistance to changes of temperature, all show the beneficial effect, and we scarcely doubt that this is due to an improvement of Beale's bioplasm, or "living matter," in the cells. Riding on horseback is likewise excellent exercise, exhilarating and accelerating the circulation, and through this the respiration; and it has been the principal means of treatment in several cases of recovery under my observation (Sydenham). Riding on donkeys may, in some localities, be substituted for horse exercise. Tricycling is likewise useful to some invalids. Pulmonary gymnastics—i.e., a methodical deep inspiration, followed, after a pause, by full expiration, practised in pure air several times a day are very useful in chronic non-febrile cases. Well-arranged exercises of the upper extremities materially assist the expansion of the apices and the subclavicular regions. Where active exercise is impossible from great weakness, or forbidden from inflammatory complications, the movement in a Bath chair is especially to be recommended, and by turning the head against the wind it can be used in almost all weathers. Open carriage exercise is likewise good, but there ought to be very little wind, or some arrangement for sheltering from the wind, by having, for instance, the front hood up, and sitting with the back to the horses, which can be well arranged in landaus. Those who have the chance of being moved in a boat up and down a river, or on calm days on the sea, often derive great benefit from this mode of motion. In some cases under my observation well-arranged journeys, in agreeable company, in rowing-boats, or small yachts, or steamers up the Thames, the Rhine, the Main, the Neckar, the Danube, the Isar, the Seine, and Meuse, have had very beneficial effect on body as well as mind, and the latter ought never to be forgotten in phthisis. In some very chronic cases of nerve prostration, with inability to walk and to take food in sufficient quantity, massage can with advantage take the place of active exercise, being a powerful accelerator of tissue-change, and leading to increased breathing and improved circulation. I have as yet had only a few cases in which I have recommended a plan somewhat analogous that of Weir Mitchell and Playfair, though very much nergetic, but with evident advantage on the nutrition, lar and and mental energy. It appears to me, so far experience goes, that there should be no active lung symptoms. The open-air treatment has been combined in those cases with massage, the patients having been placed during a greater part of the day on couches in the balcony, or in the garden. Walking exercise was not allowed during the first part of the massage treatment, but was gradually substituted for it.

4. *Strengthening of the Skin.*—Weakness of the skin is one of the prominent features as well in the tendency to phthisis as also in the developed disease, and ought always to be taken into consideration and remedied if possible. A slight change of external temperature, or exposure to a slight draught or change of clothing is apt to produce chill, which by reflex action is thrown on the lungs; it is also a frequent source of bronchitis and catarrh of the lungs, and also of digestive derangements and a great obstacle to recovery in phthisis. Constant exposure to the open air and exercise are the best tonics for the skin, and often suffice by themselves; but in many cases these must be combined or preceded by the judicious use of hydro-therapeutics. The has never been altogether neglected in England either medical men or the public, while on the Continent neglect has been incredible, and is still so in many localities hence systematic hydro-therapeutics have had their on the Continent; and in the treatment of phthisis Brehmer was the first to introduce them with special *fications,—viz., powerful cold douches to the chest of* short duration. Unger, Spengler, Dettweiler and others have continued and modified this system; Jaccoud, and other French physicians are powerful advocates hydro-therapeutics. Much benefit is no doubt obtained by well-adopted procedures, but they require most management by the medical man. Even the ordina of the skin in itself ought to be guided by the doctor, will not only examine the state of the skin, but also condition of the heart and circulation in all its the degree of reactive power must be cautiously and gradually raised. In great weakness dry rubbing an attendant of one part of the body after another is that can be done; then rubbing the chest with a towel, and dry rubbing afterwards. Later on a very sponging with tepid, and again later with cold, followed by a short return to bed, and a light, breakfast. It requires a considerable degree of force to bear with advantage on rising in the morning sponging of the whole body by cool or cold water, follo by brisk friction as daily practised by the majority of health, and forcibly recommended by J. Henry whose views on the hygiene of phthisis have good influence. A rapid plunge into cold water is in cases of fair reaction the best plan. In others a very shower bath, and, again, in others a tepid bath for a of minutes, followed by a momentary cold shower or into cold water. Many sound hints on bathing and management of the skin may be gathered from the of the "Book of Health," in his article on the skin. Al by this means the skin becomes strengthened, yet the ought never to neglect woollen clothing from head He ought not to overload himself with heavy ga while walking or riding, but he ought to have ple warm wraps when he sits down or takes passive ex The influence of dress on health has been well discu a paper by Mr. F. Treves in the "Book of Healt Pettenkofer's little book, translated into English by is full of useful information.

CASE OF ANEURYSM BY ANASTOMOS THE HEAD,

TREATED BY LIGATURE OF THE COMMON CAROTID AND SUBSEQUENT LOCAL LIGATION.

BY G. B. FERGUSON, M.D., & G. A. CARDEW, M
SURGEONS TO THE CHELTENHAM HOSPITAL AND DISPENSA

ANNIE S——, aged nineteen, came first under the ob tion of Mr. Cardew at the Cheltenham Dispens November, 1881. She then complained of a p swelling at the back and right side of the head, in also the right ear, which was greatly enlarged. had some swelling about that position throughout th of her life, the first stage having been a nævus, whi never been subjected to any treatment. During the months previous to her seeing Mr. Cardew the tumour had increased rapidly in size, and had frequently burst, severe hæmorrhage in each case ensuing. The patient was a strong-looking girl of short stature, who, with the exception of occasional headaches, had enjoyed excellent general health. On examination, a considerable tumour was visible, evidently a cirsoid aneurysm, otherwise styled aneurysm by anastomosis, extending from the back of the right ear to the occipital protuberance, and extending as high and descending as low as the upper and lower borders of the temporal bone, occupying, in fact, about twenty square inches. The tumour was of a pulpy consistence, and pulsated forcibly, as also did the ear. A loud thrill was audible over it. It was covered with small and thin-walled venous projections, which were the sites of the frequent hæmorrhages. After a specially severe and dangerous hæmorrhage about the middle of December, 1881—she was stated then to have lost about three pints,—her friends and herself became seriously alarmed, and requested the institution of some radical treatment. Accordingly she was shortly afterwards admitted into the Cheltenham Hospital, and came under the care of Dr. Ferguson. There, after due consultation, it was decided that the common carotid artery should be tied, and this was accordingly done in the ordinary manner and with the full Listerian precautions that have been employed by all the surgeons of the Cheltenham Hospital since the year 1876. The operaion presented no difficulty, and calls for no remark save hat, the omo-hyoid muscle passing apparently somewhat higher than is usually the case across the neck, it was easier to secure the artery below than above the muscle; n which former position it was accordingly reached and ied. The ligature was of chromic catgut of medium thickiess, most obligingly sent to Dr. Ferguson by Sir Joseph Lister. And in order that his kindness should not be unnecessarily trespassed on hereafter, we would desire in his place to repeat Sir Joseph's information, that chromicised atgut of identical quality can be supplied by David Marr of Holborn. The patient's progress after the operation was typically satisfactory, there having been neither pain nor any even the most trifling) elevation of temperature. In fact, the ressings were finally removed on the eleventh day after the peration, exposing then the firm cicatrix of a wound that ad evidently healed by first intention. The immediate esult of the operation was the shrinkage, almost to disappearance, of the tumour and the complete cessation of the lsation. It was, therefore, no small disappointment to notice r the removal of the dressings that a slight pulsation again perceptible over the site of the tumour. However, was shortly afterwards dismissed from the hospital in health and spirits and well pleased at the result of the tion. During the next six months her history nted no points of special interest, save that the tumour ne still less noticeable, and that the pulsation remained re. But after this six months' period of quietude a eral circulation succeeded in establishing itself to a someconsiderable extent, and the tumour began again to ine and pulsate somewhat after its former fashion (though less forcibly), and there was even some recurrence of orrhage. This being the case, Mr. Cardew (to whose care ad returned) determined to ligature the tumour subeously. One half of the tumour was accordingly ured with a silk thread in the usual manner, the latter tightly tied. The result was the entire stoppage of pulsation in the part tied. The silk was tightened day for ten days, after which time, when it had t cut its way out, it was removed. This process of ion brought about a notable consolidation of one-half e tumour, and this at the expense of but little pain or uration. Some few days afterwards the posterior pular artery was ligatured on a pin, which had been first ed under it, this step being taken in consequence of its size and evident connexion with much of the remainpulsation. Two months later the other half of the our was similarly ligatured subcutaneously, and again, weeks later, as an additional safeguard, the whole was more subcutaneously re-ligatured. With this last ion the treatment ended, almost complete obliteration e tumour having been effected, with an entire removal e hæmorrhagic tendency; and on inspection of the nt on March 7th, 1884, and eighteen months after the tion of treatment, it was evident that a substantial had been effected. Some slight softness only was arent at the position of the former growth, but there was no feeling of pulsation anywhere, save over an artery in the position of the occipital, and the ear, which was formerly so tumid, had returned to a moderate size. The hæmorrhagic tendency had not again manifested itself, and the patient's health and spirits were of the best.

Remarks.—The chief interest of this case lies in its close resemblance to the one treated by Mr. Storks and Sir William Fergusson, and narrated in the latter's System of Practical Surgery (p. 151), where much information respecting such cases will be found. Sir William Fergusson, however, trusted more to obliteration of the vessels in the growth by pins and ligatures, and Mr. Cardew to ligation *en masse.* In respect to all such cases it may be doubted if the treatment by pins or direct ligation could be safely applied without the preliminary tying of the chief nutrient artery, in reference to which question the following remarks of Sir William Fergusson are much to the point. "The practice above described was certainly attended with considerable hazard, both on account of the inflammation as well as the hæmorrhage, and it was not without misgivings that I adopted it. But the case seemed otherwise hopeless, and the previous obliteration of the common carotid led me to trust that such bleeding as might occur could be controlled. Without this preceding step it may be doubted if the result would have been equally successful; and I am therefore disposed to attribute the satisfactory issue to a combination of the two methods—viz., first, the obliteration of the main arterial current towards the disease, and then the destruction of the vessels in its substance." It is interesting, finally, to note the success of both these cases in the face of Billroth's direct condemnation of the treatment pursued (Surgical Pathology, vol. ii., p. 337), as interesting as it is to remember that the treatment which was written about so warningly by John Bell is that very one of extirpation most highly commended by Billroth.

Cheltenham.

THE BACILLUS OF SYPHILIS.[1]

BY DR. SIGMUND LUSTGARTEN,
FIRST ASSISTANT TO PROFESSOR KAPOSI IN THE DERMATOLOGICAL WARDS OF THE VIENNA GENERAL HOSPITAL.

TRANSLATED BY DR. J. N. BLOOM, B.A., M.D.

SINCE Hallier's time, a period of almost twenty-five years, the virus of. syphilis has been the subject of frequent communication and of almost constant discussion; but, nevertheless, the conviction is universal that none of these researches have even partially solved the question, because of their countless contradictions, inefficient methods, and errors that are easily recognised. And further, as my effort is not the continuation of any preceding one, I will not tax your time and patience by a review of the literature of the subject, but will at once detail my own observations, referring for the literature and development of the subject to a publication of mine shortly to appear.[2]

My researches with syphilitic products have led to the discovery of micro-organisms which until now were unknown, which are constant in their appearance, and which are thoroughly characteristic. They approach nearest in their morphological appearance and staining reaction to the bacilli of leprosy and tuberculosis, and, like these, are to be found in granulomata. By means of the method about to be given they appear as straight or curved, and sometimes irregularly bent rods, which are on an average from three and a half to four and a half micro-millimetres long, and from one-fourth to three-tenths thick. With a low power they appear uniformly smooth, presenting here and there a bulbous swelling at their extremities. With a homogeneous immersion lens (one-twentieth of an inch, Reichert) their surface appears irregularly undulatory, and slightly notched, yet in a manner such as to leave no doubt as to their rod nature. Within them we recognise, at equal distances from one another, oval, colourless, bright spores, from two to four in every bacillus. I never saw the bacilli lying free, but always enclosed in cells. These cells are from a trifle larger than, to double the size of, white blood-corpuscles. They are round, oval, or irregularly polygonal, and sometimes show a central or eccentric oval nucleus in the shape of a light spot. The bacilli are to be found in *them singly or in groups of from two to nine or more*, sometimes intertwined, or, again, in irregular confusion. The cells containing bacilli occur sparingly in the midst of the infiltration, more often on the borders of the same in the apparently normal tissue immediately adjacent. I have observed them in papules embedded between the prickle cells of the rete Malpighii, and also in the initial lesion in the lumen of a large lymphatic duct. It seems to me to be beyond doubt that they possess the power of active locomotion—migratory cells. To obtain these results I had to employ a new method. Starting with the idea that bleaching measures would be serviceable in microscopic work, as well as in the arts and trade, I succeeded, after numerous fruitless attempts, in finding what I sought in permanganate of potash and sulphurous acid. In brief the method is as follows. Sections, which have been hardened in alcohol, are coloured in a solution of gentian violet (Ehrlich-Weigert),[3] from twelve to twenty-four hours at the ordinary temperature, and then for two hours at a temperature of 104° F. The section, in order to be decolourised, is first washed in absolute alcohol for several minutes, and is then, by means of a glass or platinum needle, conveyed into a watch-glass containing about three cubic centimetres of a 1½ per cent. aqueous solution of permanganate of potash. In this it remains about ten seconds. As a result, a brown flocculent precipitate of the hyperoxide of manganese is formed in the fluid, and also covers the section. It is then placed in an aqueous solution of chemically pure sulphurous acid, in which it is deprived of the hyperoxide of manganese, either instantaneously or in a very short time, dependent upon the concentration of the acid; it now appears entirely rid of its colouring matter in some places, while in others it is still deeply coloured. It is next washed in distilled water, and is again placed in the solution of the permanganate of potash, in which, as in the succeeding repetitions, it remains three or four seconds, and from which it is again conveyed to the sulphurous acid. When it appears colourless, which as a rule occurs after this procedure has been gone through three or four times, it is dehydrated in alcohol, rendered transparent in clove oil, and mounted in Canada balsam. Xylol Canada balsam is best. This method of decolourisation, to which, besides those already mentioned, the bacilli of leprosy and tuberculosis do not yield, not only permits the micro-organisms of syphilis already described to be brought to view, but is a characteristic staining reaction of them. The bacilli of syphilis, leprosy, and tuberculosis are *not decolourised by my method. All other bacteria are.* The bacilli of syphilis, however, are differentiated from those of leprosy and tuberculosis in that the latter are not decolourised by nitric and hydrochloric acids, whereas the bacilli of syphilis are. My method failed in the examination of splenic fever, typhoid, equinia, endocarditis ulcerosa, croupous pneumonia, various secretions of wounds, the contents of acne and scabies pustules, and also in the examination of normal tissue. I wish also to mention that my attempts to prove the presence of these micro-organisms in two chancroids were futile.

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[1] A paper read before the Royal and Imperial Society of Physicians of Vienna, on March 27th, 1885.

[2] Die Syphilis Bacillen, Wiener Medizinische Jahrbucher, first quarter, 1885; also as a brochure about to be printed by Braumueller, Wien.

By means of the method just given I have examined sixteen cases of syphilis, which I will simply enumerate without going into particulars. Sections of two initial lesions; a lymphatic gland; three papules and four products of the tertiary stage; and further, the secretions of three initial lesions, and of the same number of moist papules. The result was a positive one in every case. The number of bacilli found varied. In general they were not very numerous. As regards the number, the age of the infiltration, and perhaps also the length of time since infection, are of importance. Thus I found in every section of two initial lesions, and of a periosteal gumma in a new-born child, one or more groups of bacilli, and here and there quite large groups among them; whereas in other cases a series of sections had to be examined before the undoubted presence of bacilli could be confirmed. According to my experience, the proof of the presence of the bacillus in syphilitic products is of equal diagnostic importance to that of the tubercle bacillus in the sputum.

Inasmuch as I have found, as a constant factor in undoubted syphilitic products of various kinds, a special kind of bacillus which differentiates itself in form and staining reaction from all those known up to the present time, and which therefore is a specific bacillus, and as we believe ourselves justified as regards other infectious diseases in *assuming the constant occurrence of peculiar micro-organisms* to be the cause of the disease, I maintain, as regards syphilis, that it is very probable that the bacilli which I have discovered are the carriers of the syphilitic virus. In addition to this specially important result the above-mentioned researches present several other theoretically and practically important facts and deductions, which I will briefly mention. The occurrence of bacilli enclosed in lymphoid cells whose power of locomotion, according to my before-mentioned observation, is beyond dispute; further, the occurrence of bacilli in the apparently healthy tissue lying nearest the infiltration; and, finally, and most especially, their discovery in the initial lesion in a closed lymph-duct—support the theory that the poison of syphilis is conveyed from the place of infection, first by the lymphatic system, and later through it into the blood-vessels. The occurrence of bacilli in the rete Malpighii is of great theoretical interest, and accords with the clinical observation that in certain cases syphilitic infiltrations need only lose their covering of horny epidermis (moist papules) to be contagious.

As I have shown bacilli of the same nature as in primary and secondary products to exist in typical gummata, we must look upon the latter, as indeed do the greater number of syphilologists, as specific syphilitic affections. Only a few writers have evaded the difficulty, inasmuch as they consider gummata to be the result of a specific cachexia, and not of a syphilitic virus, basing their claim upon a number of negative inoculations, and pointing out that syphilitic patients in the tertiary stage, as a rule, produce healthy—i.e., non-syphilitic—children. Recall to mind how long Ricord and his followers maintained the non-infectiousness of the products of the secondary stage, where the circumstances were so much simpler, because of the much greater frequency, the situation, and the nature of the manifestations. Further, I cannot understand why because one has some local syphilitic deposit he should not have healthy generative cells, and as a result should not produce healthy children. In heredity we must not forget that there are affections of the generative glands which have, perhaps, no subjective or clinical symptoms, and yet are followed by the production of diseased generative cells, or, at least, of spermatic fluid containing the virus. I kn
from a personal communication of Armauer Hansen, an
have been in a position to convince myself of it, th
testes of leprosy sufferers contain numerous bacilli i
between the seminal ducts, whether symptoms of dise
the testicles exist during life or not. In the futur
question as to whether a given case is syphilis can on
affirmatively answered if the presence of the sp
bacillus can be demonstrated.

In conclusion, I venture to hope that by continuo
search, particularly in the cultivation and inoculation
bacillus which I have discovered, etiological relation bet
it and syphilis will be so decidedly proved that non
deny it, and that a means will thereby be attained fo
cessfully combating one of the saddest diseases o
human race. The experiences of the last few years i
successful attenuation of the virus of splenic feve
other infectious diseases warrant the hope that thi
pectation is not over-sanguine.

CLINICAL MEMORANDA OF TWO CA OF CHRONIC VAGINITIS.

WITH REMARKS.

BY J. BRAXTON HICKS, M.D. LOND., F.R.S.,

CASE 1. *Vagina throughout covered with granula*
freely bleeding; complete recovery.—A widow, of abou
years, applied to me in consequence of a constant
discharge from the vagina. To the finger it felt velve
granular, from os to vulva, bleeding on examination
passage of the speculum caused much distress, an
bleeding; and it revealed the fact that from one end
other the vagina looked as if covered by granulation
a healing wound. The bleeding being severe, it was
sary to swab the whole surface over with tincture of p

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[3] One hundred parts of a concentrated aqueous solution of aniline with eleven parts of a concentrated alcoholic solution of gentian violet.

ride of iron diluted with three or four times its weight of water. This restrained the bleeding, but gave some pain. Astringent injections of tannin were used daily, and every third day the speculum was passed, and a sponge saturated with the dilute tincture of perchloride of iron left behind, and subsequently withdrawn. As this gave much distress, injections of the same solution were used alternately with tannin solution (two drachms to the half pint.) The vagina was very sensitive, and all manipulations were attended with distress. But at the end of a month she was free from the bleeding, and in a few weeks more the vagina had resumed its normal state.

CASE 2. *Severe chronic vaginitis, with constant and free secretion of pus for over a year; treatment by injections hitherto useless; cured.*—This case, though not raw and bleeding like that just described, was with this exception the most severe of any I have seen. Throughout the whole passage it was felt to be granular and velvety, and through the speculum the mucous membrane was observed pouring forth purulent secretion in large quantity. Her age was about thirty, married. The condition had come on gradually, and there was no information leading one to suspect it to have had its origin in gonorrhœa. She had been under treatment by injections for a year before I saw her. She was admitted under my care into Guy's Hospital, and the vagina treated by means of the speculum. Various applications were used in succession: nitrate of silver (twenty grains to the ounce) once; swabbing with the iron solution, as in the former case; plugging with cotton having powdered tannin diffused in it every day for some time—all of which gave gradual improvement. After a fortnight I applied a drachm of anhydrous sulphate of zinc to the upper half of the vagina, plugging it below with cotton well greased. This caused considerable pain and some exfoliation of the vagina; but when it had passed over, the vagina made a quick recovery, aided of course by continued though milder injections, till she left the hospital cured in about a month from admission.

It is not often that cases of like severity are seen; but many present themselves of long standing, with a granular state of the vagina and pus-like discharge, defying the former treatment. But these are obstinate only for the reason that they have not been thoroughly and perseveringly treated; either the syringing of the lotion has been inefficient, applied in vertical posture, or by a sponge only to the vulva, it having never properly reached the upper portion of the vagina. The mode of application is of more importance than the kind of drug employed. The material should be in contact with the diseased membrane for ten minutes at the very least, if possible for an hour, or, better still, for twelve hours; if used as an injection, the patient should be in the horizontal position. But it is best in all cases to commence treatment with a good swabbing of the upper half of the vagina with strong carbolic acid or iodised phenol through the speculum, which should be retained for five minutes, and then the superfluous portion removed by dry cotton. Care should be taken that a portion be not drawn down to the vulva; if it should be, pain will ensue; this, however, can be removed by washing the part with wet cotton. Care also must be taken lest the carbolic acid run down the speculum on to the thigh or drawers, for if it does, a blister will ensue, and much grumbling likewise. This carbolic application might be repeated in about six or seven days, whilst twice every day an astringent lotion can be employed as strong as can be borne without distress. Of these there are numerous kinds:—Chloralum solution (one ounce to the half pint), tannin (two drachms to the half pint), boroglyceride (one ounce to the half pint), the old sulphate of zinc and alum lotion, tannin and alum mixed, tannin with iodoform, bichloride of mercury (1 in 1000). Preceding the use of either of these, it is well to employ an antiseptic douche, in order to wash away the secretions which would impede the action of the astringents. But I prefer to apply every three or four days, through the speculum, a stronger astringent than can be employed by the syringe—such as the tincture of muriate of iron diluted three times, strong chloralum; or, as recommended by Dr. Oldham, the walls of the vagina can be kept apart by a plug of cotton. An excellent way of effecting this is by using pledgets of cotton with a string attached, diffusing through them dry powdered tannin and alum with a little iodoform, passing these through the speculum and leaving them behind, and removing them after twelve hours. This can be done every second or third day. But I think that although the healthy vagina tolerates anhydrous sulphate of zinc and the tincture of muriate of iron or the weaker solution, yet when it is abraded or spongy these agents are apt to cause exfoliation of too severe a kind. The ordinary sulphate of zinc or alum, however, it will readily bear. These and similar expedients will, if continued steadily, almost always cure the condition as far as the vagina is concerned; but inasmuch as the mucous membrane of the uterus is often involved, attention must be directed to this part, or the vaginitis will recur.

George-street, Hanover-square, W.

MALT AS FOOD.

BY J. MILNER FOTHERGILL, M.D.

MALT as food has a great future before it. In the process of malting (which is a rapid germination) a distinct change is brought about in the seed. By the action of the diastase the insoluble starch is converted into soluble dextrine, which goes sweet in the mouth, so near maltose is it. The malt-combings, which are too rich in albuminoids for the brewer's purposes, are useful when malt is looked at as a food. Malt contains dextrine (some diastase), soluble albuminoids and phosphates, and when ground is an admirable food, while it is not expensive. Its taste is pleasant. It can be made into a pudding with an egg and some milk, and as such is palatable. It can be made a constituent of a milk pudding with advantage. When the brewer mashes his malt with hot water the diastase remaining in the malt converts the dextrine into maltose, which the yeast (next added) breaks up into alcohol and carbonic acid gas. The best white malt is not heated to more than 190°, as the diastase is acted upon injuriously by a heat above that point. Maltose is a sugar which does not readily undergo the acetous fermentation, and, therefore, as Dr. Mitchell Bruce points out in his "Materia Medica and Therapeutics," "will not give rise to acidity and dyspepsia." This is a great matter, as the cane sugar the cook adds to stewed fruit and milk puddings readily undergoes the acetous fermentation in many stomachs. The lævulose sugar of fruit, like maltose, readily undergoes the alcoholic but not the acetous fermentation. Maltose being less powerfully sweet than cane sugar, a greater quantity is necessary to sweeten the pudding. If the raw starch, semolina, sago, or tapioca be first put in the dish by itself, and placed in the oven for an hour (taking care not to have it burnt by the oven being too hot), not only are the starch cells cracked, but a certain conversion of the starch into dextrine takes place. If to this be then added an equal quantity of ground malt and some hot milk poured on, and the dish be allowed to stand a few minutes before being put into the oven again, the diastase of the malt acts upon the farina and converts it into dextrine and maltose. Dextrine and maltose being soluble, the pudding is very thin. Such a pudding is admirably adapted for invalids and dyspeptics, as requiring scarcely any digestion in the body. For those with whom ordinary milk puddings produce acidity, such a pudding is specially suitable. Ground malt may be added to fresh milk, and forms an admirable food in cases of acute disease. Baked flour perhaps goes better with meat broths, to which it gives a high food value. (Well-baked flour requires but a touch of saliva to render it soluble, and, added to meat broths and gravy soups, renders them very nutritive.) Malt, being sweet, goes better with milk, or apple-water, or tamarind-water, or lemonade, and gives us a food which being all but independent of the digestive act, can be most usefully employed in the sick room. Beef-tea (which alone is scarcely a food) and milk-and-seltzerwater pall upon the palate of the sick person, who craves variety just as do healthy persons. The adoption of ground malt as a food will solve for us one or two knotty questions connected with feeding people when the digestive power is feeble. Drinks like lemonade, made with malt instead of cane-sugar, would not only not go sour in the mouth and stomach, but would contain some phosphates and soluble albuminoids, and so form admirable beverages in pyrexial states. The many malt extracts now in the market are well adapted for such end.

Park-street, W.

PATHOLOGICAL RELATIONS OF FIBROUS DISEASE.

BY CHARLES DAY, M.R.C.S., L.S.A.LOND.

IN asking permission to record in THE LANCET a case connected with a certain group of diseases presenting somewhat peculiar features, I am reminded of a passage in the preface of Mr. Abernethy's work on the "Constitutional Origin and Treatment of Local Diseases," where, supporting his opinion of the advantages resulting from the report of cases, he observes: "If diseases, like other objects which we mean to delineate, be placed in various points of view and illuminated at pleasure so as to show distinctly their various parts, one accurate representation would suffice; but we see them obscurely, and as knowledge increases it seems like light shining from different places to illuminate the various parts of our examination." Thus I think it may be allowed that although the mere account of any case of morbid growth may not be susceptible of practical deductions available in the treatment of such disease, yet it may bring to our knowledge some accompanying phenomena hitherto unobserved, some special characteristic attending the case under observation, or the absence of the special physiological effects usually observed as resulting from the interruption to or cessation of the functions of some particular organ; and I think in the case I have to narrate there will be found points of sufficient interest to merit attention.

A lady, aged forty-five, married, no family, no miscarriage, menstruation having ceased without constitutional disturbance, of good height, fine figure, excellent physique and health, the only interruption being occasional attacks of biliousness attended with "sick headache," having had some fatigue and anxiety from attendance on a sick relative during the month of January, 1882, necessitating her getting up perhaps more than once in the night to see to the invalid in the adjoining room, was attacked with catarrh. As this subsided she complained of pain in the lumbar region and shoulders, which was regarded as rheumatism resulting from the cold. But in March inconvenience was experienced from a frequent desire to pass water, with difficulty in micturition, which increasing, an examination was made on April 2nd. There was no fulness in the hypogastrium indicative of any accumulation of urine, neither was there any tenderness. On passing the catheter not more than half a pint of urine flowed out; but although the quantity was small it afforded some relief. It was of a natural colour, sp. gr. 1019, and healthy to ordinary tests; no sediment, merely mucous cloud. After a short use of the catheter, the quantity removed each time being very small, the irritability of the neck of the bladder gradually subsided, but returned in a fortnight, causing painful efforts of expulsion, with the result of passing only a few drops at a time. This condition suggested the necessity of a more thorough examination, for although there was no sign of uterine trouble save the pain in the back, now of diminished force, the rheumatic character of which appeared to be confirmed by its attacking the lower extremities, the knees, ankles, and feet becoming very painful and swollen, the joint of the great toe presenting the usual appearance of gout, the patient at the same time being exceedingly apprehensive of and sensitive to anything touching the foot, yet treatment affording no relief, and nothing to be detected amiss with the bladder, it was evident the mischief was deeper seated. On passing the finger into the vagina it encountered an obstruction which felt like the os uteri, patulous, thickened, and corrugated, the first impression being that it was a case of prolapsus, but proved to be a fibrous growth springing from the sides of and encircling the ostium vagina. Passing the finger through the centre of this growth, the upper part of the vagina felt as though roofed in with a firm, smooth body—the uterus retroverted,—the walls of which were infiltrated with fibrous deposit, the whole being firmly adherent to the brim of the pelvis, the result no doubt of perimetritis. In the left labium was a fibroid perfectly round and smooth the size of a large gall-nut. In the left labium was a similar growth of smaller size, and on examining the rectum patches of induration could be felt. From the commencement to the end of the case there was not the slightest tendency to hæmorrhage, neither was there any discharge beyond a slight moisture, having no unpleasant smell save a faint odour somewhat resembling blood halitus. The progress of the case became very rapid, the growth in the vagina increasing until the central orifice was not larger than a No. 12 bougie. For the first two months the appetite was fairly good, but gradually became more and more impaired; then came on nausea, pain after food, and at last rejection of food by vomiting, unaccompanied with coffee ground sediment, merely the food returned. The urine—dating from the time when the catheter was first used, April 2nd, when scarcely half a pint could be withdrawn — became less and less in quantity until none could be withdrawn by that instrument; and from June 2nd to June 16th, when the patient expired, the secretion entirely ceased. During this time no inconvenience or any desire to void urine was experienced; neither was there any accompanying ascites, anasarca, or delirium, no evidence of toxic action from retained urea, unless the sickness and rejection of food could be referred to that cause, and not to malignant disease. The mind remained undimmed until the last moment arrived. Only for a short time in May did she complain of being disturbed by dreams, generally of an absurd tendency. No pain was present to add to the suffering of the patient and the distress of friends. The restless tossing to and fro, the very weariness of weakness as strength went out with the ebb tide of life is painful enough to experience or to watch. The emaciation became extreme and the skin assumed such a remarkable whiteness that it might well be taken to represent the reflection of "pallida mors."

There are several interesting features in this case, which, I think, may be pointed to as deserving consideration. Thus, the urine, which from an early period of the illness was scanty, diminished in two months from the small quantity of half a pint secreted in twenty-four hours to *nil*, and for the long period of fourteen days not a drop was secreted, or if secreted did not find its way to the bladder. If formed without passing from the body, one would naturally look for some corresponding systemic disturbance, some fluid infiltration into cellular tissue or cavity, some disturbed mental functions; but no, we observed none of these things. The stomach alone exhibited disturbed action, which might have resulted from that cause, but which I think there is far greater reason to believe arose from the same organic change which had invaded so many other parts of the body. Then the bowels became equally dormant without any abdominal fulness, so that ingesta being refused, feeding per rectum of no avail, and the natural outlets for refuse material being closed, one might almost describe the wasting of the body as a process of natural cremation through the lungs. The general state of fibrosis is also remarkable. The vulva, vagina, uterus, rectum, and doubtless the kidneys and stomach, were all impregnated with the same morbid material. The suddenness of its development in an apparently healthy person, its rapid progress, the absence of pain, hæmorrhage or any discharge, the want of a probable cause of its inception, and other circumstances previously referred to, all tend to give additional interest to the examination of the subject, and make us pause, as we too freqently are obliged to do, when endeavouring to trace the why and the wherefore, the *fons et origo*, of those many mysterious and manifold changes which constitute the deviation from that happy state called health, the lot of so few of us, to that other state designated disease.

In formulating a history for the case one is somewhat at a loss. What shall we say? Was it a constitutional cachectic diathesis, such as one might affix to cancer attributable to heredity? or caused by local irritation acting through nervous conduction on an anxious and depressed condition of the mind, inducing by some unknown agency such a change in the blood and eliminating organs as to result in the formation and general deposit of this special morbid material? The pathological position of fibrous disease I think is at the present unsatisfactory, and remains one of interest and doubt. Whether it is a disease *sui generis* of independent origin, unassociated with any disease, acting, as one may say, *loco parentis*, or whether it is essentially cancerous in its nature, and therefore connected with heredity, as held by Dupuytren, Ashwell, and Hodgkin (an opinion which may yet find upholders), is a wide subject for discussion and beyond the scope of this communication. But a case in which scirrhus of the breast existed with fibroid in the vagina, similar to one reported in a recent number of THE LANCET, leads not illogically to the view that, if not identical, there is much to favour the opinion that diseases so associated may result from a similar onstitutional idiosyncrasy capable of developing the one r the other. Inquiring into the family history of the atient, I could not hear of any member who had suffered rom cancer in any form, but there had been *gout*, an ttack of which manifested *itself* during the progress of his case.

Since reading Mr. Hutchinson's admirable Bowman Lectures, in which he traces a very intimate connexion between gout and various diseased conditions of the eyes, I have been impressed with the thought whether a similar relation may not be found to exist between that disease and other maladies, such as the one in point and *others of a more* malignant character. *Additional force* has been lent to the thought by the following circumstance. A family with a long history of gout has in the last two generations suffered but little inconvenience from it. The grandfather of the present generation was the last who experienced any violent attack. He was a "martyr to it," and crippled by it. He had four children, two sons and two daughters. Of these one of the sons only had two sharp attacks in middle life, remaining free up to the time of his death, which occurred at the age of seventy from cancer of the pylorus. Not one of his six children had any positive attack of this complaint (gout), *although two of the sons* had *enlargement of the great toe*-joint, but one daughter died of cancer of the breast, two sons of cancer of the bowels, and one son of cancerous ulceration of the leg. Cancer was unknown in this family when gout was in the *ascendant*. I *can* relate another case of a lady having gouty ancestry who became the subject of scrofulous ulceration of the glands of the neck. Some time after these healed a fibrous tumour formed in the *uterus attaining* a large size, unattended with pain or hæmorrhage, the health remaining unaffected. Sir James Paget also in his Bradshawe Lecture, "On Some Rare and New Diseases," like Mr. Hutchinson, *tracking certain of them, more perhaps by history* than pathology, discovers gout to be the source whence they spring, suggesting that as the typical form becomes less common, others hitherto unknown, or but little recognised, assume a prominence and attract *attention* by their increasing number, and though presenting at the first glance scarcely any feature by which their relationship would be suspected, yet, as he observes, "types vary in diseases as in species," and "the certainty and probable extent of this variation must seem the greater if we consider the mingling of diathesis in transmission from and through both parents." Thus he says, "In phlebitis we very *often trace* a variation from the customary type or standard of the very old and heritable disease—gout; in short, all the evidence of being one of the many forms of what is called incomplete gout." Osteitis deformans, rickets, and mollities ossium appear to have some relation to gout, "for some of the cases have known inheritance of gout," and are sometimes seen in "typically gouty persons."

It must be allowed that in searching after an "unknown quantity" a certain amount of guessing is permissible, and I think, with Sir J. Paget, "that it is a legitimate use of the imagination which may happily discern a way towards the truth." Hence, when we find fibroids and cancer associated or separated, yet blastemal formations developed in individuals of a typically gouty descent, it can scarcely be called "using the imagination to the furthest bounds of propriety" to suggest that they both owe their existence to the same dyscrasia. As one swallow does not make a summer, so deductions made from one or two cases may perhaps be regarded as only hypothetical, yet they may serve as a basis on which co-operation may establish a substantial structure of facts confirmatory of the view here suggested.

St. Mark's-square, West Hackney, E.

THE BRITISH OPHTHALMIC HOSPITAL, JERUSALEM.—On the 27th ult. a meeting in furtherance of the interests of this hospital was held in the Jerusalem Chamber, Westminster. The chair was taken by Sir A. H. Layard, and amongst those present were Sir Edmund Lechmere, Bart., M.P., Hobart Pasha, Sir Richard Temple, and Mr. Mocatta. The hospital was founded in 1882 by the English branch of the Order of St. John, and is chiefly intended to provide proper treatment for the peculiar diseases of the eye prevalent amongst the population. At present the hospital contains only four beds, and is maintained at an annual cost of £300, but double the amount is needed to carry on the work effectually.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. *Proœmium.*

CHARING-CROSS HOSPITAL.

CASE OF LATE CONGENITAL SYPHILIS OF THE THROAT; TREATMENT WITH MERCURY AND RECTAL ALIMENTATION; CURE; REMARKS.

(Under the care of Dr. BRUCE.)

THE diagnosis of the later manifestations of congenital syphilis is sometimes extremely difficult, especially when, as in the case which we publish, there are few, if any, *signs* in the patient *himself of previous* disease. In the absence *of* personal and family history *in such* cases it is sometimes necessary to wait until the effect of treatment has been tried. Although congenital syphilis at the age of this patient is not often fatal, still from the situation of the local lesion it may become so, and the treatment by nutritive enemata which Dr. Bruce adopted had without doubt very great influence in producing the cure of the case.

W. D——, *aged* thirteen, from Kent, was admitted into Charing-cross Hospital on Sept. 2nd, 1884, *suffering* from severe ulceration of the throat.

History.—He stated that his illness commenced about a month ago with inflammation of the lungs, followed within a week by the sore-throat, which has persisted ever since. From the first there was pain on swallowing and discharge from the mouth, and he immediately began to lose flesh. Previous to this illness the boy had been fairly healthy, but not robust. It was ascertained that as a baby (? aged two years) he suffered from rash and snuffles, and was treated at King's College Hospital. He *has recently been living in an isolated* house, in a healthy district, and the drains have been in good condition. He is the second of nine children; the eldest is alive and well, but all the others snuffled as babies, and several are *dead*. *His father* is alive and well. His mother miscarried five times.

Condition on admission.—The patient is a wasted, fair-complexioned boy, confined to bed. He lies with the mouth *open, in obvious distress in the throat*, and speaks with a very indistinct nasal voice. The skin is of an earthy tint and very dry, without rash or œdema. The uvula and posterior border of the soft palate have entirely disappeared, leaving an ulcerated *margin*; *anterior to this the* palate is red and shiny. The posterior wall of the pharynx is entirely occupied by a foul greyish-yellow slough, which extends upwards and downwards as far *as* the eye can reach. There is no swelling of the glands of the neck. The patient takes food indifferently, owing to dysphagia; part returns through the nose, and part is rejected by vomiting. The liver and spleen are not enlarged; bowels confined. A *hacking* cough ends in expectoration of mucus and sloughs detached from the pharynx, which contain no tubercle bacilli. The physical signs connected with the lungs, heart, and abdomen are normal. Pulse 74, regular, weak; urine scanty, sp. gr. 1033, without sugar or albumen. Sleep good.

Diagnosis.—Syphilitic ulceration of the throat, congenital.

Treatment.—Mercurial ointment (half strength), a portion as large as a hazel nut to be rubbed into the adductor region of the thigh daily. Pharynx to be rubbed with solution of nitrate of silver, twenty grains to the ounce. To be fed by nutrient enemata of beef-tea, yelk of egg, and brandy, four times a day, whilst allowed to take what food he cares to attempt by the mouth.

Progress of the case.—Sept. 12th: Very little but still decided improvement; rectum becoming irritable. Two minims of tincture of opium added to each enema. Little change in throat. Strength of silver solution increased to forty grains to the ounce. A little brandy taken by the mouth.

16th.—Marked improvement; the patient looks more lively and the throat is less foul, the soft palate looking more healthy, its posterior margin more raw, and the pharynx less thickly covered with sloughs. The enemata are better retained; a little food, both solid and fluid, taken by the mouth. Urine very scanty and high-coloured.

19th.—Strength increases; but little change in throat since the 16th. Most of the enemata retained; very little food can be swallowed. Spirits improving; voice still thick and nasal. Throat to be swabbed out twice a day with silver solution, sixty grains to the ounce.

24th.—Marked improvement. He sits up for an hour, and is more active and cheerful. No dysphagia; no regurgitation of food; enemata all retained. Back of pharynx presents only a thin slough; posterior part of soft palate merely reddened.

26th.—Moves about the ward. Throat greatly improved, the red base being seen through the grey surface of the pharynx, and the edge of the soft palate looking healthy. Can take most of his food by the mouth, but has still four nutrient enemata daily. Strength of silver solution reduced. Gargle of chlorate of potash ordered. Urine more abundant.

30th.—The slough has entirely disappeared from the pharynx. Strength increased, but three pounds weight said to have been lost within three days.

Oct. 3rd.—Throat now clear. Further loss of two pounds, but strength increased. Slight salivation. Mercurial reduced to one half.

7th.—Weight has increased two pounds. Salivation continued. Mercurial inunction stopped.

10th.—Nutrient enemata stopped. Meat diet by the mouth.

14th.—Steady increase in body weight. Still salivation.

17th.—To take syrup of iodide of iron.

21st.—Has gained two pounds weight in three days. Great improvement in general appearance. Adhesions forming in pharynx, with small points of ulceration.

Nov. 19th.—Discharged cured.

Clinical remarks by Dr. BRUCE.—This case was of considerable interest from its nature, and from a certain degree of difficulty attending its diagnosis; chiefly, however, in connexion with the details of treatment. Active congenital syphilis at the age of thirteen is not so common but that it deserves record, and its diagnosis as a matter of fact may be very far from easy at first. In the present instance the previous personal history and the family history of infantile snuffles were not obtained for several days after admission, and during this time the true nature of the illness was the subject of some discussion. The question of tubercular ulceration was raised, but the absence of swelling of the neck alone went far to dispose of the suggestion. The best immediate evidence of the correctness of the diagnosis of late congenital syphilis was the result of the severe treatment to which the patient was subjected. He was at once put upon mercury. But here a great difficulty arose; the patient could not swallow. Dr. Bruce urged upon the students the absolute necessity of ensuring an abundant supply of nourishment to the tissues whilst a powerful alterative like mercury is being allowed to act upon them. It was contrary to all sound clinical rules to administer mercury to a starving child, and a patient unable to swallow was virtually starving; but just as certainly the patient would shortly die of syphilis. Feeding *per oram* was therefore given up definitely, and regular nutrient enemata ordered instead, whilst the patient was permitted to attempt to eat occasionally small portions of nutritious food. The method proved successful. A stronger solution of nitrate of silver might have been used from the first for swabbing out the throat, but the shock attending free cauterisation of the whole pharynx might have been too great in the prostrate condition of the patient. As occasionally happens, the rectum, which was irritable at first, came to retain the nutrient enemata very well. There was free salivation for a time, although the mercury was reduced, and soon omitted when the mouth became tender. Another curious fact was that the boy continued to lose weight, whilst his general appearance and strength and the local disease were all steadily improving.

DUNDEE ROYAL INFIRMARY.

ABDOMINAL SANGUINEOUS CYST; ASPIRATION; RECOVERY; REMARKS.

(Under the care of Dr. SINCLAIR.)

J. G——, aged fifty-one, flaxdresser, was admitted on May 14th, 1883, with the following history. About two months previously he observed a smooth round swelling just below the umbilicus, which rapidly increased in size; it caused no discomfort except that arising from its rapidly increasing bulk.

On admission, a rounded swelling, quite smooth to the touch, could be made out in the umbilical region of the abdomen, but extending slightly into the other regions. It was of firm consistence, and appeared to be adherent to the anterior wall of the abdomen (the umbilicus not being movable over it). No fluctuation or impulse could be elicited. There was no bruit on auscultation. The tumour occupied the umbilical part of the epigastric, hypochondriac, and right lumbar regions, and a very small portion of the hypogastric region. It was clearly separable from the hepatic dulness by a narrow resonant line, and it did not move with respiration. The hepatic and splenic dulness were of normal extent; no abnormal signs were discovered in the lungs; the cardiac dulness was normal, but the sounds were weak; tongue slightly furred but moist; appetite good; bowels constipated; temperature 99°; pulse 70, weak; respiration 28; urine pale, slightly acid, sp. gr. 1018, no albumen.

17th.—Hypodermic needle was inserted into tumour, and a syringeful of dark sherry-coloured fluid was readily withdrawn. The fluid contained nearly 50 per cent. of albumen, abundant red blood-corpuscles, and some amorphous masses. No echinococci or hooklets. Sp. gr. 1020.

21st.—The tumour was aspirated in its centre, and sixty ounces of fluid were withdrawn, of the same character as that removed by the hypodermic syringe.

22nd.—The patient complained of sickness yesterday after the operation. No trace of tumour.

June 2nd.—Patient got up.

6th.—He was dismissed in good general health, the tumour having entirely disappeared.

Remarks by Dr. SINCLAIR.—I can find no description of a similar cyst in Bright's classical memoirs. One, in some respects similar, is described by Bauer in Ziemssen's Cyclopædia.[1] It terminated fatally after two tappings. In THE LANCET of May 5th, 1883, Dr. Bristowe described two cases of abdominal cysts which resembled the one just described in the rapidity of growth and sanguineous contents. The first he concluded to be probably either a simple cyst of the spleen or a distended kidney, more probably the latter. The second had a much larger history, and was found on post-mortem examination to have been a sanguineous cyst resulting from a round-celled sarcoma. Dr. Clifford Allbutt has described a case[2] presenting some points of resemblance to mine as regards its contents; but it had a rather higher situation, required three aspirations, re-formed subsequently, and then disappeared after an attack of diarrhœa and colic. Dr. Oliver's case,[3] which occurred in a female, yielded 148 ounces of blood-red fluid on the first, and 84 ounces of similar fluid on the second, tapping, made a much slower recovery than mine, and was considered by him to be probably a hæmatocele of ovarian origin. The case described by my friend, Dr. Reid, and which was watched with great interest by us all, was clearly, I think, unconnected with any of the solid viscera of the abdomen. That it was not hydatid was evidenced by the absence of hooklets on careful microscopical examination. I can see no ground for considering its origin malignant. The impression is that it was a cyst of peritoneal origin, possibly owing to a traumatic cause, as the patient is a man of intemperate habits. I saw the man some time ago, a year after dismissal, and found him in good health, and quite capable of performing his usual work; but I thought I discovered some traces of reaccumulation. As cases of this kind are of great interest and rarity, I shall keep a watch on the patient, and report his further history should the disease return.

DOUBLE THORACIC ANEURYSM; DEATH; AUTOPSY.

(Under the care of Dr. SINCLAIR.)

For the following notes we are indebted to Mr. J. Mackie Whyte, M.A., M.B., house-surgeon.

J. W——, aged forty-nine, a tall well-built man, employed as a labourer in a jute works, was admitted on Feb. 14th, 1884, as an urgent case. His history was that he had been subject to pain in the chest since the middle of December, 1883, when he fell downstairs while drunk, and received a scalp wound, but no other external injury. The wound healed, but the pain in the chest became worse, catching his breath. For the past fortnight his voice had been hoarse, and he had had a troublesome cough, with inability to expectorate the mucus, which caused a disagreeable rattling noise. Had been in the army; while there he had acquired syphilis; otherwise previous health had been good.

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[1] Vol. viii., pp. 338–39.

[2] THE LANCET, July 7th, 1883.

[3] Ibid., Oct. 11th, 1884.

On admission, he was in a state of great dyspnœa; he spoke in a hoarse whisper; cough of a ringing character; throat dry; no difficulty in swallowing; pupils equal; radial pulses equal, 54 per minute, regular; pain in region of heart apex on any exertion; a "gripping" pain, constant, in interscapular region; general præcordial heaving, and epigastric pulsation; apex-beat in fifth space, nipple line; systolic murmur in mitral and aortic areas, loudest in mitral; second sound accentuated, with a distinct pump-valve character, best marked in aortic area; dulness in upper part of thorax extending from one inch to right of manubrium across sternum for five inches. This dulness was continuous with the cardiac dulness. There was also dulness in the left interscapular region, opposite the spine of the scapula and a little below. The second sound was distinctly heard accentuated over this area. Physical signs of lungs normal, except for occasional bronchitic wheeze. Examination of larynx showed paralysis of left vocal cord. Urine normal. Great improvement followed the treatment, which consisted of rest in bed and administration of bromide and iodide of potassium internally. On May 19th the patient was sent to the Dundee Convalescent Home, but was refused admittance, as he had got drunk on the way.

He presented himself again at the infirmary on Oct. 29th, as bad as ever. Had been employed chiefly in carrying bales of jute; always felt a "gripping" pain in the chest when lifting. Physical signs much the same as when in the infirmary before. Left radial pulse smaller than right, 66 per minute. Improvement was slow, and relapses of dyspnœa occurred. Towards the end of November breathing was very noisy.

On Dec. 10th, about 10.15 A.M., the patient, who had been sleeping quietly, was seized with a paroxysm of dyspnœa. There was laryngeal stridor, like cock-crowing; the face became blue, and he sprang out of bed, saying he was dying. In about five minutes he expired. His face became pale after death.

Autopsy.—Right pleura adherent in whole extent; some tough adhesions also in left, especially near the upper part. Thoracic contents removed in mass with some difficulty, on account of close adhesions to the vertebræ. There had been no escape of blood from the vessels. Heart empty of blood; both auricles dilated, walls very thin; left ventricle considerably hypertrophied. Aortic valve incompetent; no vegetations but dilatation, circumference being three inches as measured when laid open. Mitral valve somewhat dilated. Ascending part of aorta showed fusiform dilatation, circumference four inches. Wall atheromatous, with calcareous deposits. The dilatation extended as far as the origin of the left common carotid; the vessels arising from the arch were not themselves involved. Thus the transverse portion towards its termination was of normal calibre, but at the bend it suddenly dilated into an aneurysm larger than a cricket-ball. This consisted of two parts, separated by a constriction; the anterior had the same lining as the aorta, with which it was obviously continuous, the posterior had a wall which was dark in colour and rough, and was largely filled by a laminated organised clot. The pressure of this part had caused deep erosion of the bodies of the third, fourth, and fifth dorsal vertebræ, in front and on the left. The left vagus was traced over the transverse part of the arch and its branch, the left recurrent laryngeal was followed round part of the aneurysm, where it was thickened and irregular, and up alongside the trachea. Neither trachea nor œsophagus showed any effects of pressure; the latter was close to the aneurysm. Lungs much congested; also the abdominal viscera. Fibrous adhesions from old peri-hepatitis all over the liver.

Remarks by Dr. **SINCLAIR**.—The history of this case clearly suggested aortic aneurysm; the symptoms on admission pointed most distinctly in the same direction; and the physical signs left no doubt that we had before us a case of aneurysm of the arch pressing on the left recurrent laryngeal nerve. In every respect, then, the record was singularly complete and satisfactory up till the moment of the patient's death, which occurred quite suddenly. The autopsy showed that it was not due to rupture of the sac, as might have been anticipated. In the absence of any other quite satisfactory explanation, I suppose paralysis of the heart may be suggested as the most likely cause. The case is interesting also from the fact that there were two distinct aneurysms, separated by a short interval of aorta of normal calibre. This circumstance alone seems to me to be of sufficient interest to justify its being placed on record.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Discussion on Cholera.

THE adjourned discussion on cholera was held, and the debate concluded, on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair.

Dr. **HENEAGE GIBBES** said that he fully agreed with everything that Dr. Klein had said. In acute cases of cholera, instead of a pure cultivation of comma bacilli in the lower part of the ileum, comma bacilli were to be found few and far between. Cultivations of the small straight bacilli in a large number of test tubes proved that these bacilli were not young comma bacilli, but belonged to a distinct species, for they grew in a totally different manner, did not liquefy the gelatine, grew on the surface chiefly, and were not motile. That the comma bacilli were not discovered in the tissues was certainly not due to defective staining. He had used every possible staining fluid and combination of fluids, but had found no comma bacilli, in the intestinal walls. A case of infantile diarrhœa showed a more pronounced morbid change in the intestines than exists in cholera, and so the intestinal lesion could not account for the collapse of cholera. In one case in Lieberkühn's follicles many putrefactive bacilli were present, and this specimen was shown to the Society.

Sir **GUYER HUNTER** said that, as he understood, Koch had shown that the comma bacillus stood in the relation of cause and effect to cholera. He did not believe that cholera was dependent on the action of a germ. He referred to the characters of the last outbreak of cholera in Egypt and in France as proving his contention. The report on Egyptian cholera presented to Her Majesty's Government also maintained the same views. He considered that cholera had been proved to be non-contagious. A surgeon, writing in the *Practitioner* of July, 1875, advised the injection of chloral hydrate in doses of 10 grains in 100 minims; this treatment in his hands had been so disastrous that he was compelled to stop it. He did not agree that opiates increased the danger from collapse; any premonitory diarrhœa should be treated by opium and stimulants. He believed cholera to be due to a series or combination of conditions. If the germ is killed by decomposition, then cholera ought not to exist in localities where filth and garbage abound. Strict hygiene was the only way to prevent the occurrence of cholera. Any form of ill-health predisposed to cholera.

Dr. **PYE SMITH** spoke of the choleraic discharge, and agreed with Cohnheim that this was not of inflammatory origin. In cases of cholera sicca large quantities of detached epithelium were present in the intestines, but this was probably the result of post-mortem change. Moreau obtained a "paralytic secretion" by section of the mesenteric nerves, and the large quantity of effusion thus obtained coincided in many respects with the choleraic discharge. The nervous influence was conveyed, not through the splanchnics or vagus, but by way of the smaller mesenteric ganglia derived from the solar plexus; and excision of these ganglia led to the production of a large intestinal effusion. He was in accord with the generalisation made by Gaskell, to the effect that the exciting influences were conducted by means of grey nerve fibres, whilst inhibitory influences passed along the medullated nerve fibres.

Mr. **MACNAMARA** said that no epidemic was known to have arisen outside the confines of British India. The statements made by Klein with regard to infection were in absolute variance with the conclusions of all previous workers. It was remarkable that the comma bacillus should correspond to the characters of the contagium as described by Parkes—viz., that it was destroyed by acids, that its life in water was very brief, and that the conditions under which the water was placed must be of a certain kind. He referred to the case in which choleraic discharge polluted some water of which nineteen individuals drank, and within thirty-six hours five of these persons were dead of Asiatic cholera. He quoted many circumstances and incidents tending to prove that cholera was a contagious disease. From his observations made on individuals dead of cholera, he could not agree with the views expressed by the President on the existence of spasm of the pulmonary arterioles, for he had not found distension of the right side of the heart. He was not successful in the treatment of cholera by castor oil; he had seen the best results by the use of opiates and astringents.

Dr. John Murray thought that the habitat of the poison of cholera was the mucous membrane of the intestines: it first caused paralysis of the sympathetic, which prevented the excretion of effete material. The left ventricle was sometimes occupied by a coagulum, which was black at first, but tended to become decolourised. A feeble fluttering pulse was the sign of the formation of a clot in the heart. In his experience laxatives were most dangerous, and in this he was corroborated by the experience of observers in all parts of India. Any remedy which promoted the secretion of the bile and gastric juice was of value in the early stage of cholera. Transfusion of hot saline solutions caused the spasm of the pulmonary arterioles to pass away.

Dr. Heron reverted to the question of the bacteriology of cholera. From the beginning of the growth of the various comma bacilli, it was possible to distinguish Koch's bacillus from all the others. All the comma bacilli could be distinguished from one another. In cholera nostras the comma bacillus of Finkler would be found, and not the bacillus of Koch. He thought that cases of cholera might be distinguished from cases of cholera nostras by a cultivation of the comma bacillus; the mode of growth was so different. He said that Koch and Klein agreed that there was a comma bacillus peculiar to cholera, which was to be found nowhere else. The comma bacillus of Lewis was different from that of Koch. He had examined eight cases of tubercular diarrhœa without discovering the comma bacillus of Koch, and so could not agree with Klein's statement on this point. Koch and his staff of assistants held themselves in readiness to go to any part of Germany in order to determine by bacteriological research whether a case submitted to them was one of Asiatic cholera or not. We were indebted to Koch for this possibility of diagnosing true cholera, as we were for so many other discoveries in medical science.

Dr. Thin said that many people certainly believed that the comma bacillus of Koch could be found in other diseases and conditions besides cholera; he thought that Dr. Klein, or those who reported him, were responsible for this impression. He narrated circumstances which seemed to show that hygienic conditions, and kinds of food, such as lettuces manured with human excreta, did exercise an influence in the production of cholera.

Dr. J. Johnston had had much experience of cholera at Shanghai. Cholera prevailed when the fruit season began. Cholera was predisposed to, if not caused by errors in diet, carelessness in the use of purgatives, and other forms of indiscretion. Drinking water was certainly active in the causation of cholera. Evacuant treatment in his hands was decidedly harmful.

Mr. Sedgwick said that at the time he wrote his work on the Urinary Secretion in Cholera and Diarrhœa he was not aware that urea was a binamide of carbonic acid; knowing this he had less difficulty in understanding how the preformation of carbonic acid in the tissues and blood should continue and the preformation of binamide of urea should cease through the defective oxidation of the blood. M. Doyère had investigated the chemistry of respiration in cholera. In normal respiration there were 44 vols. of CO_2 discharged in every 1000 vols. of expired air to every 165 vols. of oxygen taken up. The relative diminution in the amount of carbonic acid in the expired air in cholera was accompanied by an increase in the proportion of the oxygen. In collapse about three-fifths of the normal quantity of CO_2 were discharged, and the oxygen absorbed was largely in excess of the carbonic acid eliminated. In cholera the mammary secretion and all other secretions having to do with the generative organs were not interfered with. Encysted dropsy of the ovaries suffered little or no diminution in amount. Anasarca might disappear completely, as Dr. Barlow had shown, in cases which recovered. Menstruation was not delayed or checked in cholera unless the period were about to commence. The liquor amnii and urinary secretion of the fœtus were not stopped. He did not agree with the view expressed by Mr. Simon, that cholera always proved fatal to the fœtus, and quoted some statistics of a French author in this regard.

Dr. Maclagan believed that the poison of cholera was a micro-organism, for nothing but a living thing could reproduce itself. It was a peculiarity of parasites that each had its own nidus. Cholera had its relationship with the acute specific fevers. The nidus in cholera was the epithelium of the internal viscera, and especially of the small intestine. He did not agree that the shedding of epithelium was a normal post-mortem change. The collapse of cholera might be likened unto the rigor of onset of the specific fevers.

Mr. Scriven could not understand how the viscidity of the blood in cholera could not be due to a loss of water, for the blood had unlimited power of appropriating fluid from all the tissues. He could not agree with the views of the President in this respect. He dwelt at some length on the treatment of the various stages of cholera.

Dr. Lowndes said that diffusible nutritive fluids, like Liebig's raw soup, in small doses every half-hour, were most valuable in the treatment of cholera.

Dr. Johnson, in reply, maintained that the distension of the right side of the heart was a fact testified to by Dr. Edmund Parkes before his own observations and experiments had been made. Dr. Sutton, in the fourth volume of the London Hospital Reports, confirmed the same observations. The right side of the heart was distended and the left nearly empty in cases of cholera. He said that chloral hydrate did not abolish arterial spasm. He contended that spasm of the pulmonary arterioles explained the greater number of the phenomena of collapse, and still maintained the accuracy of his views as to the evacuant treatment in the early stages of cholera. He fully recognised the existence of cholera so severe that no treatment could avail.

CLINICAL SOCIETY OF LONDON.

Treatment of Spina Bifida.—Choreiform Movements in Infantile Spasmodic Paralysis.—Carcinoma and Calculus of the Bladder.—Pistol-shot Wounds.

An ordinary meeting of this Society was held on the 27th ult., Mr. Thomas Bryant, F.R.C.S., President, in the chair.

Mr. Mayo Robson (Leeds) read a paper on a Series of Cases of Spina Bifida treated by Plastic Operation. He described four cases on which he had operated:—Case 1. A. S——, aged six days, was the subject of a spina bifida the size of an orange; operated on Oct. 26th, 1882. The child lived and thrived for a year, when it died after a day's illness from teething convulsions. The site of the tumour presented only a linear scar. The interposed periosteum had not formed new bone. (The excised sac was shown to the Society.) Case 2. Mary A——, aged eighteen days, a puny, ill-developed child, with a large spina bifida in the lumbar region; the sac was thin and translucent quite to the margin of the tumour, and the skin around inflamed. It was all excised except two narrow portions, which were sufficient to form meningeal flaps, these being covered in by skin flaps obtained by separation and sliding from the lumbar regions. The wound healed by first intention, but the child died from a continuation of the marasmus present before operation. At the autopsy the whole lumbar spine and part of the sacrum were bifid. There was no meningitis. (Specimen was shown to the Society.) Case 3. L. J——, aged sixteen, the subject of spina bifida in the lumbar region, the size of a fœtal head, was admitted to the infirmary to have tenotomy performed for talipes. The sac of the spina bifida began to inflame the day after admission, before any operation had been done, and produced high fever and severe head symptoms, threatening life. It was aspirated eight times between November 13th and December 9th, the last three aspirations yielding pus. She was rapidly losing ground and apparently sinking, so on December 11th Mr. Robson excised the sac after reflecting the skin by crucial incision; the cavity was drained for a few days. The head symptoms were at once relieved, and she recovered rapidly, being discharged cured twenty-four days after operation, with the wound quite healed, and only a scar where the tumour had been. (Patient shown to the Society.) Case 4. D. C——, aged seven, had a spina bifida in the lumbar region, seven inches and a half in circumference; sac thin and inflamed at fundus; skin dissected from sac, and redundant sac and integument removed; suture of meninges by catgut, and of skin by wire. The wound healed by first intention, and the patient was discharged cured thirteen days after operation. The child was shown to the Society six weeks after with a linear scar where the tumour had been. All the operations were performed strictly antiseptically, the eucalyptus atmosphere being used instead of the spray. The points to which he would draw attention are—1. The principle of closing the meninges by bringing together two serous surfaces, as in peritoneal surgery, and superimposing separate skin flaps, the meningeal and skin lines of the suture not being apposite. 2. The great importance of observing strict antiseptic precautions, as a septic condition would probably end in the same way as these cases usually do when they spontaneously ulcerate—viz., by meningitis and convulsions. 3. The success attending the plastic operation in cases which are absolutely not amenable to any other form of treatment—e.g., where the coverings are thin, or the opening into the spinal canal large. 4. The possibility of transplanting periosteum, and its capability of surviving, as in the case read first. One may hope that the use of human periosteum—"e.g., from a recently amputated limb"—will give better results. 5. The successful issue of Case 3, where, although the sac was acutely inflamed, its complete removal with efficient drainage effected a cure. This case presents several points of pathological importance—e.g., (a) The rise of temperature without septicity apparently due to tension of, or pressure on, the great nerve centres. (b) The great relief given by aspiration. (c) Suppuration in the sac, possibly due to simple tension, probably not due to septicity, as the fluid was quite sweet on every occasion. (d) The entire absence of brain symptoms after operation, although the pressure on the great nerve centres must have been considerably interfered with during the time of healing of the wound. Mr. Robson suggested the following as a practical classification of cases of spina bifida for purposes of treatment—(1) Where no operation can or should be done. (2) Where no operation need be done. (3) Where an operation should be done. Class 1 (a) Where the deformity is very extensive, as in fissure of the whole or a considerable portion of the vertebral canal. (b) Where there is complete paraplegia. (c) Where the sac is large, the fissure extensive, and the coverings excessively thin up to the edge of the tumour, and no skin can be obtained to cover the meninges. But that such extreme examples even may stand a chance of cure is proved by Case 2. Class 2. Where nothing need be done. Where the sac is small and the coverings are so dense and firm as to form a good pad over the opening in the spinal column. Class 3. Where some operation should be done. (a) Where the sac only communicates with the spinal canal by means of a small opening; here it is a simple matter to dissect off the skin, expose the neck of the sac, ligature it by means of one circular ligature, and cut off the redundant meninges, bringing the skin over so as to have the line of skin sutures quite at the side away from the pedicle. Such an operation was performed by Mr. Ed. Atkinson, one of Mr. Robson's colleagues at the Leeds Infirmary. (b) Where the sac has a good skin cover and communicates with the spinal canal by a large opening, it is quite easy to perform the operation described in Case 1, carefully closing the meninges, and, if possible, placing the line of skin sutures away from the meningeal line of union. Such cases have been operated on successfully, not only by Mr. Robson but by Prof. Jessop, U.S.A. Human periosteum might be placed between the meninges and skin, but Mr. Robson is not at all sure that a thin plate of bone, if formed, would be very serviceable. If the expanded neural arches be large, he thought it might be feasible to bend them towards the central line, and by uniting them with thin silver wire, obtain a truly physiological closure of the spinal canal. (c) Where the coverings are excessively thin up to the margin of the tumour, as in Case 2, the operation is more difficult and uncertain, as the skin can only be obtained by a process of sliding from contiguous parts, and the tension necessarily present is not conducive to healing. (d) Where the spinal cord or the nerves are blended with the sac, he advises excision of portions of the redundant meninges at one or more places between the nerves, replacing the nervous structures in the spinal canal, and bringing over the skin cover; free drainage should be kept up between the membranes and integuments, or if this could not be done, the membranes might be punctured, the collapsed sac, with the nerves intact, being placed in the canal, and the skin cover made as before. It is important to remember that a silver or a leather shield should be worn over the site of the operation in order to protect the parts from injury, and to prevent the cicatrix from stretching or giving way.—The PRESIDENT said that the surgical treatment adopted by Mr. Robson gave surgeons an additional means of dealing with cases of spina bifida. He considered that there was not sufficient evidence to show that the method of injection was one which could be regarded as a good surgical procedure. He congratulated Mr. Robson on having been so successful in the four cases which he had treated. It was remarkable that the nerves were not involved in a large number of cases of spina bifida. The last suggestion with regard to the treatment made by the author was a good one. No doubt the committee now sitting on spina bifida would carefully consider the method of treatment advocated by Mr. Robson.—Mr. R. W. PARKER joined with the President in congratulating Mr. Robson on the successful results of his plan of treatment, yet he could hardly think that it would lead to results very much superior to those obtained by treatment of a less operative kind, for the lesion was a very profound one in many cases, such as no operation could rectify. An examination of the specimens in the London museums showed that the cord and its nerves entered the sac in upwards of 95 per cent. of all cases, a fact which itself contra-indicated excision of the sac wall; but if the sac wall were simply tucked in after the normal skin around its base had been detached, and, after more or less evacuation of the fluid, a satisfactory result might be obtained. The Society's sub-committee were just about to present their report, and, as a member of that committee, he would refrain from anticipating the conclusions which would be expressed in the report. He was sure Mr. Robson's paper would receive every attention. He might add that cases of cure by injection had been reported in which, as was found on post-mortem examination years later, the cleft in the spinal column was found to be very extensive. In the infant shown, although the sac was absent, there appeared still to be a soft fluctuating swelling over its former site.—Mr. RICKMAN J. GODLEE said it was evident that in the plastic operation of Mr. Robson there was no great risk of producing meningitis, and in this respect it seemed almost a safer method than injection with Morton's fluid. Reference was made to two cases which he had recently observed in which the injection of Morton's fluid was followed by the development of meningitis. In one case the child had convulsions, hemiplegia, and vesical paralysis; cystitis set in later on; the patient ultimately died. The occurrence of severe symptoms after surgical treatment might in some way be related to the frequency, with which some part of the spinal cord was involved in the sac, though in many cases the filum terminale could be the only part involved, and this was comparatively an unimportant structure. He spoke of a post-mortem examination which he had recently witnessed on a case of spina bifida in which the three or four lower sacral nerves were involved, and arose from points slightly to one side of the middle line, which he supposed was occupied by the expanded filum terminale of the cord. He said that Mr. Robson's was a line of treatment that would have to be carefully considered.—Mr. R. W. PARKER said that the spinal cord extended the whole length of the spinal column in intra-uterine life, and there was practically no filum terminale. Moreover, he had never succeeded in detecting the filum terminale in any specimen that he had examined.—Mr. MAYO ROBSON, in reply, believed that there were many cases of spina bifida into the formation of which no part of the spinal cord or nerves entered. It was impossible for distension of the filum terminale to give rise to the kind of sac which he exhibited, and which he had removed from one of his cases. With regard to the injection of Morton's fluid, in all the cases in which he had seen it used the result was fatal.

Dr. W. B. HADDEN read notes of a case of Choreiform Movements Supervening in Infancy and of Congenital Origin. The patient was a female, aged twenty-two; there was nothing to note in the family history, except that a sister died of fits at the age of ten months. The mother had had no miscarriages, but was said to have suffered from albuminuria for two months before the patient was born. Labour came on at full time, lasted twelve hours, and no instruments were used. Very soon after birth the child's head used to fall back, and she did not sit up like other children. There were no fits and no head injury. She never walked better than she does now. Movements were first noticed when the child was aged seven months, but did not attract serious attention until the age of two years. They have persisted ever since. She began to talk between the age of two and three years. Catamenia appeared at the age of fifteen, have always been regular, but scanty and painful. Patient is a short, stout, well-developed girl; is quite intelligent, reads fairly, but cannot write because of the condition of her hands. Her head is large and flat, but symmetrical; palate hard and a little arched; no deformity of spine. Movements very slight when lying down, and absent during sleep. They are at once noticeable on attempting movement, or if the patient be excited. The face and upper limbs are mainly affected. On trying to speak the face becomes contorted. The angles of the mouth are retracted, upper lip and alæ nasi raised, the forehead wrinkled, the eyelids partially closed. Hence, there are various and rapidly succeeding grimaces. An appearance of gaiety is followed by a frown, by a sniff of disdain, and by a momentarily lacrymose aspect. The speech is interrupted and the words brought out explosively. The muscles of the back and abdomen are unaffected. There are slight movements of the tongue. The fingers are flexed at the metacarpo-phalangeal joints, and extended at the phalangeal. But this position is not fixed. Fingers are often expanded, and there are simultaneous to-and-fro movements, suggesting athetosis, but more rapid and various. Some rigidity exists about the muscles of the arms and forearms. The muscles are well developed, and respond well to galvanism. Her grasp is feeble. Her legs are short, well developed, and as she lies in bed have very fair power. She cannot stand or walk without help. When supported she shuffles along, the legs overlapping, and the knees rubbing together, and the thighs being adducted. There is much resistance to passive movement of the legs; the tendon reflexes are probably exaggerated; there is occasional ankle-clonus; sensation, both common and special, is perfect; no loss of control over evacuations. The case belongs to a group which, though having individual differences, all possess one common feature, the spastic condition of the legs and the peculiar gait. The spastic paraplegia may exist alone, with or without affection of the arms, constituting Charcot's spasmodic tabes dorsalis, or infantile spasmodic paralysis. In two cases described by the author there were atrophic changes in the upper extremity. In addition to the present case he has seen two very similar instances. In connexion with the spasmodic paraplegia of infants other symptoms may be present, such as fits, mental defect, nystagmus, squint and inequality of pupils, deformity of chest, a symmetry of skull, delayed dentition, and defects of speech. The lesion in the case described was probably congenital, a porencephalous defect. Dr. Ross describes a very similar case, apparently due to injury in infancy. The author has never been able to satisfy himself that infantile spasmodic paralysis and congenital athetosis are dependent on injury either during or after birth. Treatment of various kinds was tried in the present case, but without benefit.—Dr. ANGEL MONEY thought that the case was interesting from many points of view. The presence of tonic and clonic spasms, with some impairment of the conduction of volitional impulses, in one and the same case, was instructive. It was suggested that tonic and clonic spasms were essentially due to differences in degree of innutrition of the nerve cells of the anterior horns, which energised the muscles. With regard to morbid anatomy, he considered that destructive lesions of any sort in any part of the pyramidal tracts could induce the symptoms of such cases.—Dr. HADDEN, in reply, said that some cases were of congenital origin, and some might be due to arrest of development of the fibres of the pyramidal tract which grew downwards from the large motor nerve cells in the cerebral cortex. In some cases the course of the cortico-medullary fibres appeared to be arrested high up in the brain; in other instances the paths were interrupted lower down. Cases had been put on record in which the spastic conditions appeared to be dependent on atrophy of the pyramidal tracts without any sclerotic change. That injury during or at birth may give rise to spasmodic paralysis seemed to have been placed beyond doubt by a case recorded by Ross. A case in which fits beginning in the paralysed arm were the first symptom was referred to; the legs were in a condition of spastic paraplegia.

Mr. JOHN R. LUNN read notes of a case of Calculus and Tumour of the Bladder. J. C——, aged thirty-five, married, a stoker by trade, was admitted into the St. Marylebone Infirmary on Sept. 8th, 1884. Four weeks before admission he noticed his water run away involuntarily, and had attended as out-patient at a hospital, where he was sounded. Two weeks before admission he was obliged to give up work and his urine became very offensive and thick. On admission, No. 10 catheter was passed, which gave the patient a good deal of pain; the urine was loaded with albumen and pus. The prostate was apparently enlarged. The patient was again sounded on Sept. 17th, when a stone was struck. Lateral lithotomy was performed on the 18th, and a large calculus removed from the bladder, weighing $1\frac{1}{2}$ oz., composed of oxalates, phosphates, and a little uric acid. In addition to the calculus a new growth was felt, which was too extensive to remove. The day after the operation the patient expressed himself much better and free from pain. Vomiting set in on the third day. He passed claret-coloured urine through the wound. The left kidney was noted to be enlarged two days before he died, on Sept. 26th. At the autopsy the wound in the perineum looked very unhealthy and showed no signs of healing. The bladder weighed 8 oz., was devoid of urine, and almost the entire surface was occupied by a new growth. No secondary growths were found. Both kidneys and ureters were distended with purulent matter. The right kidney weighed 8 oz., the left 14 oz. Mr. Lunn said that he was indebted to Mr. Eve for the microscopical account of the growth. The structure of the tumour had the character of a soft cancer, the cells were rather small and spheroidal, with large nuclei, and were in no part observed to be arranged in nests. In the softer parts of the tumour they were aggregated in large diffuse, small and rounded masses in spaces formed by a scanty stroma, while in the firmer parts the stroma was abundant and fibrous, and the cells formed elongated rods and masses.—The PRESIDENT remarked on the insidious nature of disease of the bladder. The connexion between growth and calculus was not very common. He referred to a case which had been under his care of papillomata covering every part of the mucous membrane of the viscus, and to another of extensive cancerous disease. He asked if there was much bleeding during the operation in Mr. Lunn's case.—Mr. LUNN answered in the negative.

Mr. RICHARD BARWELL read a paper on three cases of Pistol Shot Wound. The first case was that of a wound self-inflicted with a Derringer of $\frac{4}{10}$th-inch bore. The bullet passed through the seventh costal cartilage, the diaphragm, the stomach, and just notching the kidney, passed out of the abdomen between the first and second lumbar transverse process. The young man survived twenty-two hours. The case was introduced partly to show the power of these small pistols, but chiefly as evidence of the very little bruising which small conical projectiles fired at short ranges produce, there being no ecchymoses round any of the openings into the viscera, &c., save a very little at the kidney. The second case was that of a gentleman who shot himself with a pistol of under $\frac{1}{4}$-in. bore. The wound was within the areola of the left nipple; but the weapon must have been held obliquely, for the bullet, missing the heart, passed through about eight inches of the left lung and lay outside the chest near the lower angle of the scapula. There was very considerable hæmorrhage from the wound, and coughing caused the blood to be driven out several feet. There was also a good deal of hæmoptysis. Strict quietude, ice, acetate of lead, and opium subdued in about fifteen hours the external hæmorrhage, but the hæmoptysis continued for six days. Pneumothorax and hæmothorax, together with surgical emphysema, were very marked. Pneumonia supervened on the seventh day. After the lapse of three weeks, during which he had been in a very precarious condition, improvement set in, which steadily progressed. On the thirty-fifth day Mr. Barwell removed the bullet, which he had hitherto avoided doing, wishing the wound of exit from the chest to become closed previously. Seven weeks after the injury the man was discharged. The third case was that of a man who shot himself in the mouth and in the ear with a revolver, $\frac{1}{4}$-inch bore. The wound first named was on the left side of the soft palate, and, penetrating that part, inflicted another in the posterior wall of the pharynx. That bullet has never been found and has given no trouble, it is probably encapsuled among the deep muscles on the left of the spine. The other bullet passed for three-quarters of an inch down the auditory meatus without injuring it on either side, then continuing its transverse course, left that channel by a small wound at its posterior part. A probe passed in here touched a substance which Mr. Barwell believed to be metallic, exactly two inches from the margin of the meatus. The depth and direction of the wound delayed any attempt at extraction, because it appeared to Mr. Barwell that the projectile must lie in very dangerous proximity to the lateral sinus. After forty-eight hours, abundance of clear serum, which was either cerebro-spinal fluid or liquor cotunnii, became mixed with the blood discharged; the admixture of blood, then of pus, prevented any testing for sugar. The man, who was singularly apathetic, progressed favourably with the exception that a week after the infliction of the wound the parts about the angle and ascending ramus of the jaw swelled, and shortly after suppurated. On Dec. 4th there was in those parts sufficient disturbance to indicate that the projectile was producing considerable irritation, and ought, if possible, to be removed. Moreover, if, as seemed possible, the lateral sinus had been injured, the wound would in the five weeks have healed. With some difficulty, Mr. Barwell passed a Nélaton's probe sufficiently far to obtain the lead mark. Making a curved incision behind the pinna, he trephined the mastoid process to the depth of three-quarters of an inch; finding a small tract leading still deeper, he again got on Nélaton's probe the lead stain, but at a distance from the trephine hole of more than an inch. The track was cautiously enlarged with a gouge, a pair of sinus forceps passed down to the bullet, which, although very firmly fixed in the bone, was successfully removed. After this operation the man had no bad symptoms, the abscess in the jaw was opened, and the hole made by the trephine rapidly filled. All these men shot themselves, the pistols were therefore held very close, and they all used weapons the projectile of which is driven by the fulminate alone. In the last case the muzzle was on the skin, and in a medico-legal point of view it is important to note that there was no mark of burn nor of powder-tattoo. This, Mr. Barwell says, in his experience is the usual condition with weapons of that description. The other lessons from these cases are that small conical bullets discharged at short range bruise soft parts but very little, and though the projectile possesses very considerable velocity, the immediate result of such wounds, unless some peculiarly vital part be hit, is small.

Mr. **Mayo Robson** showed living specimens of two cases of Spina Bifida, which he had treated by plastic operation. Mr. J. R. **Lunn** showed microscopical sections of Tumour of the Bladder.

MEDICAL SOCIETY OF LONDON.

Treatment of Cervical Caries.—Necrosing Ethmoiditis and Mucous Polypi.—The Larynx in Tabes Dorsalis.

An ordinary meeting of this Society was held last Monday, Dr. W. Miller Ord, President, in the chair. The meeting was prolonged for half an hour.

Mr. **Walsham** read a paper on the Treatment of Angular Curvature of the Spine in the Upper Dorsal and Lower Cervical Regions by a combination of jacket and collar of poroplastic felt. The apparatus was made at Mr. Walsham's suggestion by Mr. Cocking. The apparatus, which is made of one piece of felt, consists of an ordinary poroplastic felt jacket, together with accurately fitting collar and helmet piece. The jacket and collar are continuous posteriorly, the collar portion being carried upwards over the occiput, and, after encircling the neck, is bent downwards over the shoulder and upper part of the front of the chest, where it overlaps the jacket portion, and is there secured in position by straps and buckles. The cases for which it is especially adapted are those where the caries is situated too high in the spine to be benefited by a common felt or plaster jacket, and too low to be treated by the various collars in use for cervical caries; in short, for cases in which the jury mast is now so frequently used. Mr. Walsham has not been satisfied with the results of the jury mast apparatus. The plaster-of-Paris jacket has no basis of support in the small pelvis of young children, and thus the jacket did not remove pressure from the diseased vertebræ. By means of the poroplastic apparatus the pressure is removed from the bodies of the vertebræ, though the weight might be transmitted through the posterior parts of the spine—i.e., through the articular processes and their supports. The results have been very encouraging. Several of the children who could not stand before the apparatus was applied were able to walk a few weeks later. The gravest objection to which it appeared open is that it is likely to embarrass thoracic breathing; but this is an evil incidental to all forms of jacket. The further advantages of this jacket over the jury mast apparatus were that, besides that it did not slip down in young children and males, the parts are held more steady, the rotatory and lateral movements of the neck in cervical caries are controlled, there are no straps to stretch or to be in different states of tension, according to the varying positions of the head, and the patient can lie down in greater comfort. Mr. Walsham advocated long daily periods of recumbency in the treatment of this form of caries. In conclusion, he urged the advantages of felt as a material for jackets generally, as against plaster-of-Paris. Sweat did not soften the felt unless the temperature reached 150° F. The shape could be well made and maintained. He proved that felt was porous by filling a hollow ball made of felt with smoke. The smoke slowly escaped through the interstices of the felt.—Mr. W. **Adams** thought nothing could be better than the apparatus shown by Mr. Walsham, though Dr. Sayre's improved plaster-of-Paris jacket was sufficient for the treatment of all ordinary cases. The recumbent posture maintained for a long period was of the utmost value; where paralysis supervened, he advised the recumbent posture with extension of the spinal column by means of a special apparatus. Reference was made to a case under his care in which complete motor and sensory paralysis supervened somewhat suddenly. Rest on an inclined plane with extension was followed by considerable and rapid improvement of the nervous disease.—Mr. **Noble Smith** said that the surgeon should attend to the application of the apparatus. Mr. Walsham relied not on extension, but merely on straightening the spine; in this way a sufficient amount of pressure was taken off. Paralysis might be relieved by this method of treatment. Recumbency in the prone position was most important; in a severe case in a child the prone position was spontaneously adopted.—Mr. **Clutton** referred to a form of apparatus, made of leather and iron of the same pattern as the poroplastic jacket of Mr. Walsham, which was in use at St. Thomas's Hospital. He considered that the apparatus with the jury mast was of no value. Recumbency was a most important point.—Mr. **Bernard Roth** spoke of treatment by passive extension of the spine. He asked how often ablution was performed in Mr. Walsham's patients, and what was done when caries existed high up in the neck. He had seen Fletcher's bags used with advantage.—Mr. **Walsham** said that no doubt recumbency was an invaluable mode of treatment; in disease of the first cervical vertebræ it was imperative.

Dr. **Woakes** read a lengthy paper on Necrosing Ethmoiditis and Mucous Polypi. He discussed the question of the relation of the diseased bone to polypi. The disease was extensive, and began as a chronic inflammation of the muco-periosteum lining the turbinate bones as well as the cells of the ethmoid bone; this inflammation of the soft tissues was associated with necrosis of the dissepiments of bones. The catarrh spreads from without inwards. His account of the disease was drawn from a record of eighty cases which he had collected in his experience at the Throat Hospital. As to the etiology, cold in the head, an exanthem (measles or scarlet fever), and blows were the usually assigned exciting causes. Sex showed but little difference. The disease was generally bilateral, the left side was more frequently attacked than the right; it occurred at all ages after puberty, and especially in young adults of either sex. A broadening of the bridge of the nose was sometimes produced. In the first stage the thickened muco-periosteum was rather pale, and could be seen to be hypertrophied, especially over the front of the middle turbinate bone. In the proliferating stage soft reddish fleshy growths were to be seen. Necrosis was always to be detected after the first stage of the disease had been passed. In some cases the hiatus semilunaris was a good deal enlarged. A probe might be passed in many directions, and dead bone struck in the anterior and posterior ethmoidal cells. The necrosis antedates the appearance of the mucous polypi. The myxomatous tissue proliferated near the surface of the muco-periosteum, no matter whether on the free surface of the turbinate bones or within the ethmoidal cells. There was no attempt at a new formation of bone. The characters of the polypi depend partly on their situation. The bones around the nose may be implicated, and so the base of the skull may be perforated, or the orbital wall destroyed at parts, and vision may be lost. The superior maxilla may become affected, and abscess of the antrum, or polypoid degeneration of its lining membrane, take place. In the third stage of the disease thin plates of atrophied bone may be found in the midst of an exuberant polypoid excrescence. The disease, as a rule, tends steadily to progress. Mr. Edgar

Thurston had prepared many microscopical sections illustrative of the pathology of the disease. These specimens and many drawings were shown to the Fellows of the Society.—Mr. Spencer Watson asked whether the conclusions were taken by Dr. Woakes as applying universally to mucous polypi. It was difficult to understand that necrosis could have preceded the appearance of all polypi. He said that Professor Silvercandle had shown that one in eight individuals suffered from nasal polypi. He believed that obstruction in the nostril due to posterior rhinitis, or to deviation of the nasal septum, or to chronic hypertrophic rhinitis of the middle turbinate bone, was a frequent cause of nasal polypi.—Mr. Cresswell Baber thought that nasal polypi were not always preceded by necrosis or even accompanied by it. The turbinate bones vary in size in different individuals, and it might be difficult to say whether a turbinate bone was of normal size or not.—Mr. Stoker concurred with the views of Dr. Woakes.—Mr. W. Pye said that on examining the nose with a probe in cases of nasal polypi in children, he had nearly always struck dead bone.—Dr. Woakes said, in reply, that he could not say that necrosis was invariably the precursor of nasal polypi; all he could say was that he had never examined cases of polypi without detecting necrosis. The necrotic spicules are formed *pari passu* with the development of mucous tissue. A normal middle turbinate bone was a rare structure.

The President and Dr. Semon showed a case of Locomotor Ataxy, with bilateral incomplete paralysis of the abductors of the glottis openers, which they believed was more frequent than was ordinarily supposed. This stenosis of the glottis had gone on under observation, and was unaccompanied by any obvious symptoms. The larynx ought to be examined in all cases of tabes dorsalis. Charcot, McBride, and Ernest Jacob of Leeds had described similar cases of abductor paralysis. A primary rigidity of the glottis muscles was believed in by some German authorities, who said they had never seen a progressive development of the stenosis; these views were refuted by the present case. Tracheotomy might have to be resorted to ere long, and the patient had had several attacks of laryngeal obstruction, which at times threatened tracheotomy.

HARVEIAN SOCIETY OF LONDON.

Early Treatment of Concomitant Squint.—Resection of the Intestine.

A meeting of this Society was held on the 19th ult., the President, Dr. T. Morton, in the chair.

Mr. W. Adams Frost read a paper on the Early Treatment of Concomitant Squint. The author submitted that in practice the truth and importance of the following propositions were not sufficiently recognised:—1. This form of squint seldom recovers spontaneously. 2. It leads, in a few months, to very great impairment of the vision of the squinting eye. 3. The majority of the cases can, in the early stages, be cured by correcting the hypermetropia with glasses. The binocular character of this form of strabismus, and the distinction between a "fixed" squint and an alternating one, were briefly illustrated by means of Mr. Priestley Smith's model. The popular notion that children squint from imitation or caprice, and that they grow out of it, was entirely erroneous. Among the cases treated at St. George's Hospital during the last four years, 60·5 per cent. presented amblyopia of the squinting eye. Amblyopia never appears while the squint is alternating. Of the cases in which there was no amblyopia in the above series, 41·6 per cent. were alternating. It commenced directly the squint became fixed. Hundreds of eyes were lost every year from neglected squint. If, when all accommodation was rendered impossible by the application of atropine, the squint disappeared, it would almost certainly cease by correcting the hypermetropia. Spectacles could be given at a very early age; Mr. Frost had often ordered them for children under four years, and had never found reason to regret having done so. When a child was too young to wear glasses, treatment might be postponed if the squint was really alternating; if it was fixed, either an operation was necessary, or the other eye must be covered to save the squinting eye from amblyopia.

Mr. Frederick Treves then read a paper on Resection of the Intestine. The operation in question dated from about the year 1878, although many isolated instances had been recorded much earlier. Some 150 cases were now on record. The operation was applicable to both the small and the large intestine, and had been performed for the following conditions:—(1) Single and epitheliomatous strictures; (2) neoplasms other than cancer; (3) extensive matting of the bowels, involving obstruction; (4) irreducible intussusceptions; (5) gunshot and allied injuries of the bowel; (6) gangrenous gut in hernia; (7) fæcal fistulæ. It might also be applied to certain perforating ulcers of the intestine. The operation implied merely the application to the intestine of a simple and recognised plan of treatment which was adopted in corresponding conditions to other parts of the body. In most of the affections named, enterotomy and colotomy offered the only other means of treatment; they gave temporary relief only, leaving the cause of the disturbance untouched. In another series of cases the removal from the body as early as possible of gangrenous and putrid parts was obviously indicated. Lastly, the mortality in gunshot wounds of the bowel was so exceedingly high that the operation had in these cases great claims to consideration. The *modus operandi* was illustrated by enterectomy. There were two procedures. In one, the divided ends were united by sutures immediately after the resection; in the other the part was excised and an artificial anus established, which was closed after a time by a second operation. The abdomen having been opened, the loop to be excised was drawn out and placed upon a sponge. The gut above and below was severed either by the fingers of an assistant or by special clamps introduced by Rydygier, Bishop, Makins, and Treves. The gut was excised, and with it a triangular piece of the mesentery, the cut edges of the latter being united by a few points of suture. If the bowel was to be united, the best material was Chinese twist applied by Hagedorn's needle and needleholder. Of the various sutures, the Czerny-Lembert was the best. A row of sutures was introduced involving only the mucous membrane, and a second row involving only the peritoneum. Some fifteen points of suture were needed for the first row, and about twenty-five for the second. Of the two methods, the second was by far the better. Most of the patients were not in a condition to bear a protracted operation. Moreover, the first method did not give complete relief to the obstruction, did not ensure emptying the bowel above the obstruction, and involved great risk from fæcal extravasation owing to the distended state of the gut and to the great risk of gangrene along the suture line. Besides,,there was great difficulty in uniting the much dilated upper segment to the shrunken segment below. The mortality of the operation was discussed, its simplicity urged, and a hope was expressed that its application would be cautiously and more widely extended.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

Prevention of Heat Apoplexy.

At a meeting of this Society, held on the 11th ult., Dr. Norman Chevers, President, in the chair,

Surgeon-General A. C. C. De Renzy, C.B., read a paper entitled the Prevention of Heat Apoplexy, of which the following is an abstract:—The object of this paper was to apply Indian experience in the prevention of heat apoplexy among the troops in the Soudan. The writer resided for many years at the Multan in the Punjab, one of the hottest places in the world, and saw a great deal of heat apoplexy amongst the British troops and railway *employés*. In the month of June the temperature in the shade rises to 120° F., and a black bulb thermometer registers 176°. An ordinary thermometer, exposed in the sun's rays, registers 157°. The dryness of the air is extraordinary. The mean humidity of May is only 26°, and the maximum humidity is as low as 17°; saturation equal to 100°. Dust storms occur at very short intervals all through the hot weather. The nights are comparatively cool. In June, the hottest month, the minimum thermometer goes down to 71°. About 10 o'clock the sky becomes perfectly cloudless, and the earth radiates the heat stored up during the daytime rapidly. But there are usually three or four intensely hot nights in the year when the clouds do not disperse, and so radiation is obstructed. On such occasions the writer has found his bed so intensely hot that he had to have it sprinkled with water to make it tolerably cool. The mean daily range of May is 34·43°. The climate of the Soudan is several degrees cooler than that of Multan, and not at all so trying, and, as experience shows that a very fair standard of health can with suitable arrangements be secured for British troops at Multan, it is reasonable to hope that, so far as high temperature is concerned, a similar result may be attained in the Soudan. Contrary to what might have been expected, Multan has long been one of the healthiest stations in Northern India. Taking the returns of the last eighteen years, it stands fifth in the order of healthiness. Bareilly stands first, with a death-rate of 12·01 per 1000. Fort William second, with a death-rate of 12·33 per 1000, while the death-rate of Multan was 15·15 per 1000, or actually lower than the death-rate of the troops stationed in England was thirty years ago. If the mortality from heat apoplexy were reduced, as it might be, Multan, notwithstanding the intense heat of its summer, would be one of the healthiest stations for British troops in the world. All through the summer of 1848 the fort of Multan was invested by British troops, who had little sickness and few casualties from heat apoplexy. Lord Gough, who was Commander-in-Chief in India at that time, was altogether opposed to the operations being carried on in the summer, as he thought it impossible that the troops could withstand the heat. The result proved that his apprehensions were unfounded. With good tents, a good commissariat, and arrangements well adapted in other respects for the protection of the health of the troops, the campaign was brought to a brilliant close by the capture of the fortress, one of the strongest in India. Heat apoplexy causes a large number of deaths among the troops; taking one year with another about 100. Heat apoplexy occurs through very different circumstances—(1) under exposure to the direct rays of the sun; (2) under exposure to great heat in the shade. The deaths under the second head are far more numerous than those under the first. For the prevention of heat apoplexy, especially under exposure to the direct rays of sun, two things are indispensable —(1) that the clothes be loose and light, so as not to interfere with the free movements of the chest and evaporation of the skin, and so as not to obstruct the cervical circulation, and (2) that a supply of drink should always be at hand to relieve the first signs of thirst. The importance of these precautions was illustrated by several striking cases that fell under the writer's notice. At the capture of Rangoon in 1852, of two sets of men who were alike in all other respects, one fought in shirt sleeves under an intensely hot sun, the other in blue cloth tightly fitting coats; many of the latter began to drop down insensible shortly after coming into action, their commanding officer being among the number. The want of water causes great loss of life from heat apoplexy on first service in India. The arrangements for the supply of water are most defective. Natives use immense quantities of water under exposure to the sun, and to this practice was attributed their immunity from heat apoplexy. While the deaths from this disease among the British troops were 20 per 10,000 of strength, they were only 2 per 10,000 among native troops. Heat apoplexy is very rare among officers, who are careful about their dress, and also to have something at hand to relieve thirst. Sportsmen who go out shooting in the hottest weather suffer very rarely. And the disease is unknown among Assam tea-planters, whose business requires them to expose themselves in the sun in the hottest season and at the hottest time of the day. The great majority of the cases of heat apoplexy among soldiers, due to exposures to great heat in the shade, occur between sunset and midnight. This was attributed to the peculiar meteorological conditions of that period of the day in conjunction with the crowding of the men in the canteen. The breeze es away; clouds form, obstructing radiation; and while s lasts the men crowd in dense masses into the canteen, ventilation of which is altogether inadequate for the ber of men who temporarily occupy it. Crowding, even hough it is only for a short period, is most dangerous when the air is very hot. The danger is much increased when, to the crowding, excess in the use of alcohol is superadded. The barracks in the evenings become as hot as ovens. As a means of cooling the barracks it was proposed that they should be douched every evening after sunset. With the present barbarous system of water-supply this suggestion would be impracticable, but if the troops are to be protected against the ravages of cholera and typhoid fever, water must be provided under pressure, as it is in more civilised countries. This proposal when made some years ago had the approval of Mr. Edwin Chadwick, but it was found impossible to give it a trial. In conclusion, it was contended that experience in the hottest parts of India warrants the hope that under good arrangements the losses from heat apoplexy among the troops in the Soudan may be kept within very moderate limits. With good tents of the Indian pattern, attention to clothing, good arrangements for the supply of water, avoidance of overcrowding, especially in tents or huts, and extreme moderation in the use of alcohol, for which tea should be substituted, the losses from apoplexy would be very small.—In the discussion which followed Sir William Smart, Drs. Murray, Scriven, Lloyd, White, Lawson, Cullimore, Comyn, and Squire, and Mr. Shirley Murphy took part.

MEDICAL OFFICERS OF HEALTH SOCIETY.

A MEETING of the above Society was held on Friday, March 20th, Dr. J. Orme Dudfield, President, in the chair.

Mr. A. WYNTER BLYTH read a paper on the Action of Disinfectants on Microzooids. The author enumerated the diseases of animals and men which may be considered beyond a doubt to have an intimate connexion with microzooids—viz., mouse and rabbit septicæmia, a fatal disease of the guinea-pig produced by the micrococcus tetragenus, the anthrax of animals and men, fowl cholera, glanders, malignant œdema, bovine and human tuberculosis, erysipelas, some forms of pneumonia, and acute osteo-myelitis. On the other hand, it had not been proved satisfactorily that diphtheria, scarlatina, relapsing fever, cholera, typhoid fever, and some others were due to microzooids, though the balance of evidence seemed to be in favour of such a view; probably zymotic diseases would come to be recognised as consisting essentially of the invasion of the tissues of individual megazooids by legions of microzooids. The term "disinfectant" the author used throughout as synonymous with "germicide." A colony of microzooids submitted to a solution of a true disinfectant, and then having been freed from the disinfectant and put into the best possible conditions for development and growth, showed no signs of life; the colony had been disinfected—that is, killed. Hence, according to this view, disinfection is either a destruction of pathogenic microzooids or a poisoning of them; the end effected being for practical purposes the same. The author then briefly detailed his own experiments on spore anthrax published in the Royal Society of Edinburgh's *Transactions*, and summarised the experiments of Schiff and Fischer on phthisical sputum, and those of Fischer and Proskauer on the action of chlorine and bromine. The author had made some observations on mouse septicæmia; threads were infected with mouse septicæmia and soaked for half an hour in Tuson's disinfectant, a saturated solution of sulphate of iron, a 10 per cent. alcoholic solution of cresylic acid, a 10 per cent. solution of sulphenic acid, a 10 per cent. solution of chlorozone, and a strong solution of chloride of zinc. The sulphenic acid and the alcoholic solution of cresylic acid disinfected perfectly the thread; but of the other agents some had no effect, others superficially disinfected. His most recent researches were on the pyridine bases. He had raised a pure cultivation (from the last stages of nasal catarrh) of a yellow bacillus which liquefied gelatine; the liquid gelatine then becoming yellow and fluorescent. This bacillus produced spores of moderate resistance, was not pathogenic, and grew with rapidity at ordinary temperatures. Threads infected with this yellow bacillus were soaked in a 1 per cent. solution of pyridine, collidin, lutidine, and acridine, and then, having been freed from the disinfectant, they were brought up on nutrient gelatine; the threads were found to show no signs of growth around them, whereas the "control" threads grew rapidly. The antiseptic power of pyridine was tested on the organisms found in sour milk, and pyridine was shown to inhibit growth. Since the pyridine bases are present in tobacco smoke, the smoke from an ordinary pipe of tobacco was passed through water, and the resulting solution was found to be, so far as the yellow bacillus is concerned, strongly disinfectant. The results of experiments with the yellow bacillus, when treated with solution of morphine, strychnine, atropine, and other alkaloids, were also given, from which it would seem that strong solutions will kill the bacillus. Turning to the practical aspect of the question, the author summarised the general conclusion to be drawn from these researches. Disinfectants, when they are not destructive agents, act as poisons; they poison the microzooid in a manner not essentially different from the lethal poisoning of a higher life form, and this is the reason why such poisonous substances as corrosive sublimate, carbolic acid, and chlorine are most to be relied upon. It was evident that to perfectly disinfect, the element of lime must not be disregarded; to receive the specific excreta in a strong solution of sulphate of iron or of carbolic acid, and then within a few minutes cast the excreta into a drain, could only superficially disinfect, and such excreta might in many obvious ways again become dangerous. He considered that the best and most efficient way to disinfect a room after disease was:—First, to make it as much as possible like an hermetically sealed box, and in this box to evolve chlorine; 3 lb. of chloride of lime and 3 lb. of hydrochloric acid for every 1000 cubic feet of space. The chloride of lime was to be divided into several distinct parts in deep vessels, and to be placed as high in the room as possible; the hydrochloric acid was to be mixed with the chloride of lime gradually in the manner described by Fischer and Proskauer. The room was to be kept closed for twenty-four hours. Secondly, all things in the room capable of being submitted to a moist heat were to be taken away to a suitable apparatus. Thirdly, the floor was to be washed with a solution of corrosive sublimate (1 in 1000). The principles of this process had been carried out in the parish of Marylebone for more than a year, and the author considered the method the best at present known.—In the discussion which followed, the President, Dr. Iliff, Dr. C. E. Saunders, Mr. Kingzett, and Drs. Moore, Corner, and Willoughby took part. Mr. Wynter Blyth replied, and the meeting was adjourned.

ACADEMY OF MEDICINE IN IRELAND.

THE opening meeting of the Sub-section of Public Health was held on Feb. 5th.

The PRESIDENT (Dr. J. W. Moore) delivered an inaugural address on the Relations of the Medical Profession to the Sanitary Organisation of Ireland. He contended that the medical aspect of that organisation has signally failed, mainly from two causes—want of supervision and inadequate remuneration. The Public Health Act, 1878, gives only a permissive power (Sec. 2) to the Local Government Board to provide supervision, and naturally this power in consequence has not been exercised. Again, the remuneration allowed to medical officers of health by the various sanitary authorities under the sanction of the Local Government Board is, except in a very few instances, so shamefully inadequate that the only possible result is practically to render the Act a dead letter so far as medical inspection or advice is concerned. Accordingly, he recommended (1) that the Local Government Board, acting as the supreme sanitary authority, should divide Ireland into a suitable number of districts for purposes of sanitary inspection; (2) that each of these districts should be subject to the supervision of an inspecting medical officer of health, or, as such an officer is called in Sec. 11 of the Public Health Act, a medical superintendent officer of health; (3) that the dispensary medical officer should still act as district medical officer of health, reporting as occasion may arise, not directly to the local sanitary authority, but to the inspecting medical officer of health for his district; (4) that the Local Government Board, and not the local sanitary authorities, should appoint the inspecting medical officers of health; and (5) that these officials should be sanitary experts, independent of the local authorities, and reporting from time to time to the Local Government Board. As to remuneration, the inspecting medical officers of health should be paid, by the Treasury alone, a salary which would enable them to forego private practice, in order to devote their whole time and talents to the discharge of their very responsible and very onerous duties. The district medical officers of health should be paid, in equal shares by the Treasury and by the local authorities, a suitable salary, not a nominal one, subject to a minimal but not to a maximal scale—i.e., a salary which should not be less than a fixed amount, say one-half their salary as dispensary medical officers.—On the motion of Dr. CAMERON, seconded by the REGISTRAR-GENERAL, thanks were voted to the President for his address.

Dr. E. MACDOWEL COSGRAVE read a paper on Sewer Gas and Disease. He pointed out that in spite of the Dublin-street sewers being well ventilated, it is certain that if imperfections exist in the house-drain, sewer gas will enter, as the outer air is generally denser than that in houses and as the updraught of fires causes a strong suction. At present many houses have rubble drains, which are always imperfect, and of the pipe-drains many are defective, and hardly any houses are properly disconnected from the street sewers, dependence being placed upon water-traps, which are untrustworthy as excluders of sewer gas. The remedy is to have a properly set pipe-drain cut off from the sewer by an intercepting trap, and ventilated by openings at each end at different levels, to cause a constant current of air. Occasional flushing with a sudden forcible rush of water will render such an arrangement almost perfect. Sewer gas seems to affect health in two ways: (1) As a direct poison, causing sore-throat, diarrhœa, &c.; and (2) by devitalising the oxygen of the air, and so leading to anæmia, lassitude, depression of spirits, &c. The symptoms often show first in servants who sleep in the basement. Surgical operations and confinements are specially liable to be followed by mischief if sewer gas can find entry. The Sanitary Protection Department of the Dublin Sanitary Association affords a reliable means of examining into house drainage, and the engineer to the department (Mr. W. Kaye Parry, M.A., C.E.) states that the following grave sanitary defects were found in some of the houses he examined:—Rubble drains under house, 26 per cent.; defective pipe drains, 61 per cent.; drains not intercepted from sewers, 65 per cent.; unventilated drains, 75 per cent.; waterclosets objectionable, 83 per cent.; soil-pipe leaking, 44 per cent.; scullery dangerously trapped, 50 per cent. In many cases disease accompanied the foregoing defects, especially enteric fever, diphtheria, and illness after confinements. Medical men ought, in the interests of preventive medicine, to have drains, &c., put right before outbreaks of illness, and not wait for illness to call their attention to defective drainage.—Dr. CAMERON gave several instances of defective drainage, and said in reference to exhalations from ventilators, experiments proved there was an influx of air into drains in the morning when fires were lighted.—Dr. GRIMSHAW, registrar-general, remarked that instances came under his notice of the defective line and falls in some of the public sewers in Dublin, and the consequent difficulty in obtaining sufficient falls in house drains in some localities. There was a case where the engineer of the Sanitary Association was unable to provide a complete and efficient system of house drainage in a particular place, because the level of the street sewer was not sufficiently below the level of the floor of the basement storey of the house. In this case it was impossible to put in an intercepting trap.—Surgeon-Major HAMILTON mentioned the steps he took for the ventilation of the barrack sewers of Dublin garrison.—Dr. Doyle, Dr. Henry Kennedy, and the Chairman having taken part in the discussion, Dr. Cosgrave replied, and the Sub-section adjourned.

Reviews and Notices of Books.

Conferences on Education: International Health Exhibition. Vols. XIII., XIV., XV., and XVI.; Sections A, B, C, and D.

THE main value of the educational section of the Health Exhibition consisted in the conferences between British and foreign educationists. Much interesting information was given, and some novel views and theories were discussed. It may appear strange, however, that there should have been such a dearth of medical opinion. We think only four members of the profession spoke at all, none of them frequently.

Although most of the speakers on female education appeared to understand the importance of due attention to the physical welfare of the scholars, some of the suggestions strike us as ill-considered—e.g., the Rev. Canon Holland, who spoke of the importance of ventilation of school-rooms by raised sash frames and Tobin's tubes, had apparently become oblivious of sanitary considerations when he went on to remark: "A glass house, just large enough to hold a piano and a chair, and erected in the corner of a class-room, makes it quite feasible to have two instruments in one room. In our Baker-street school we have two glass houses in one room, and three pianos, which are all played at the same time without any collision of sound." It would be interesting to know whether the air in this school has become scientific enough to pass through the glass houses which effectually keep out sound, or whether there is some provision for ventilating these chambers from the outside, and if so of what nature, as from their small size—about 100 cubic feet, we gather from the description—they must require a peculiarly efficient apparatus for the purpose.

We could have wished for further information from Miss Freeman as to the exact duties and powers of the female physicians whom she says all the colleges for women in America employ, and who are "salaried to keep the students well." She significantly adds that they lose their appointments if they do not do so. Can these advanced institutions have taken a leaf out of the social customs book of the "Heathen Chinee"?

The German gymnastic system was referred to by Mr. J. Holm, F.R.C.S.E., as having been productive of great good in developing "manliness." He also remarked on Ling's system, which recognises the necessity of a knowledge of anatomy in the teacher of gymnastics in order that some muscles should not receive an undue development to the detriment of other parts of the body; but that all parts should be brought equally into play, and thus equal circulation, distribution of nerve power, and nutrition should be set up. The Royal Gymnastic Institute at Stockholm requires from persons desirous of obtaining appointments (to teach gymnastics) at public schools a course of study, including lectures on anatomy, physiology, pathology, and hygiene, together with instruction in the theory and practice of gymnastics, educational, military, and medical. Physicians by a modified course can obtain a diploma enabling them to practise medical gymnastics.

Many striking instances were given of the advance in intelligence of young children under the Kindergarten system, but we should scarcely desire one of our own children to exhibit such precocity as the little boy, aged five, whose mother wrote to Mr. Fitch that he "told a builder that his mother would not take his house, and on being asked why, he replied, 'You have not disconnected your drain-pipe.' He then explained that the drain-pipe ought to be cut off with an open gully underneath."

Notwithstanding many divergencies of opinion about minor matters, it is gratifying to note the substantial agreement of most of the speakers with the views expressed by the "Lancet Commission," published in 1875, which we believe paved the way for the many reforms in school hygiene which have been established since that time.

OUR LIBRARY TABLE.

St. Thomas's Hospital Reports. New Series. Edited by Dr. S. J. SHARKEY and Mr. FRANCIS MASON. Vol. XIII. London: J. and A. Churchill. 1885.—The contents of this volume are varied, and contain many original articles, of which the following must be noticed:—Vegetable Growths as Purifiers of Sewage, by A. W. Bennett, M.A.; A Case of Osteitis Deformans, by John R. Lunn; Two Cases of General Atrophy treated by the "Weir Mitchell" Method, by Seymour J. Sharkey, M.B.; Case of Gastro-Colic Fistula, by W. Edmunds, M.D., F.R.C.S.; Cases of Tubercular Meningitis, by J. S. Bristowe, M.D.; Mediastino-Pericarditis, by H. R. Hutton, M.B.; Four Cases of Symmetrical Development of Fat, by Sir William Mac Cormac; Cases of Ulcerative Endocarditis, by R. Percy Smith, M.D. The Medical Report for 1883 has been drawn up by Dr. Hadden, and the Surgical Report by W. H. Battle, F.R.C.S.

Lewis's Practical Series: Dental Surgery for General Practitioners and Students of Medicine. By ASHLEY W. BARRETT, M.B. Lond., M.R.C.S., L.D.S. London: H. K. Lewis. 1885.—A book of this kind has long been wanted, but it can scarcely be said that this one fully supplies the want. It seems chiefly to fail in its lack of illustrations. Though the description of operations is fairly good, yet Mr. Barrett too often forgets he is addressing medical practitioners, and writes as though his readers quite understood all about excavators, chisels, and the various instruments familiar to the dental surgeon. Perhaps in future editions this defect may be remedied, but even in its present form this book will be of distinct use to those for whom it is intended, as it contains in brief and readable form, though in rather long-winded sentences, much useful and practical instruction. Mr. Barrett's views on caries are crude, but his directions as to the treatment of it are very plain, though, as already intimated, they would be much helped by a few good illustrations. One sentence in the chapter on anæsthetics cannot be too highly commended; it reads: "The undesirability of employing any anæsthetic, be it 'gas,' ether, or chloroform, without the presence and assistance of a companion, who should be a qualified medical practitioner, needs hardly to be indicated." Of course this means in addition to the operator, be he surgeon or dentist.

The Ship Captain's Medical Guide. Compiled by the late HARRY LEACH, M.R.C.P., and revised by WILLIAM SPOONER, L.R.C.P., M.R.C.S. Ninth Edition. London: Simpkin, Marshall, & Co. 1885.—This edition has been revised throughout, and whilst the general plan of the work has been maintained, extensive additions and alterations have been made. The chapter on the Prevention of Disease has been entirely rewritten, an account of some diseases not previously mentioned has been inserted, and an endeavour made to bring the treatment up to the standard of the present day. The work, which is written solely for the use of masters and mates of vessels at sea, is confined strictly to a plain and brief description of accidents and diseases that occur on board ship; and much care has been taken to show, as clearly as possible, how these accidents and diseases can be best treated by a non-professional man.

Medical Reports of the Chinese Customs Service. Compiled and arranged by Surgeon-General C. A. GORDON, M.D. London: Baillière, Tindall, and Cox. 1884.—The publication of the medical reports, an epitome of which is contained in the laborious work which we now briefly notice, was first suggested by Dr. Jamieson of Shanghai. Surgeon-General Gordon has compiled a summary of the reports. A perusal of the list of contents of the volume before us is sufficient to show how varied and extensive the subjects treated by the medical officers connected with the Imperial Maritime Service of China have been. The information relating to the state of health of foreign residents at the several treaty ports is very valuable, and will be of service to those who contemplate proceeding to that vast country. The section of the volume dealing with materia medica is a valuable collection of information regarding the general use of medicines in China. The appendix contains a vast amount of information on many subjects, and notably on the prevalence of epidemics from the earliest times; a sort of medical diary dating back from B.C. 224 has been compiled at the cost of immense labour and patience, giving a chronological record of prevailing pestilences in China, as well as of epidemics and natural phenomena, such as earthquakes, inundations, and famines, in other parts of the world.

Seasonal Map.—We have received a copy of a seasonal climatic map of the United States, graphically illustrating combined humidity statistics with isotherms, wind statistics, and seasonal tables, compiled from data of the Signal Service Bureau by Charles Denison, A.M., M.D., Professor of Diseases of the Chest and of Climatology in the Medical Department of the University of Denver. Tables for computing the comparative dryness and moisture of localities are also given. By the colour shades in which the map is printed are represented even divisions of the climate of the United States, starting from the mean for the whole country, as determined by the combined humidity statistics. The map represents a marvellous amount of labour, and cannot fail to be of great value to meteorologists as well as to officers engaged in sanitary administrative work in the United States.

Ellis's Irish Education Directory and Scholastic Guide for 1885. Dublin: E. Ponsonby. London: Simpkin, Marshall, and Co.—This book, which is now in the fourth year of its issue, contains full information as to the Irish universities and professional schools, and the institutions in Ireland for promoting intermediate, technical, and primary education, with complete alphabetical lists of Irish colleges and schools, and copious alphabetical and classified indexes. The part of the book relating to national education has been entirely remodelled, so as to make it a complete guide to the national system. It will prove useful to all who are in need of the information it is specially designed to afford.

We have received the second volume of the *Dictionary of National Biography*, edited by Leslie Stephen. It extends from Annesley to Baird, and from every point of view is fully equal to its predecessor, which we noticed favourably in a recent issue.

Analytical Records.

THE PURE WATER COMPANY.

In spite of modern sanitary reform, the water-supply of country places, and even of many towns, is still so unsatisfactory that the production of aerated beverages absolutely above suspicion is a matter of some difficulty as well as of great importance. In the strictest sense of the term pure water is as yet unknown to us. Even Stas, who, after chemical treatment, rectified the water used in his celebrated stoichiometrical determinations, twelve times from a platinum still, did not attain perfection. But a visit to the works of the Pure Water Company at Battersea will convince anyone that practical purity can be attained with the appliances which modern chemical and engineering science have provided. In these works water is first distilled by the powerful apparatus invented by the late Dr. Normandy, and greatly improved of late. It is extensively used in ships, and is, we understand, doing good service in the present Egyptian campaign. Nine thousand gallons a day can be obtained from the engine in the works. We analysed a sample of this water, and obtained less than half a grain per gallon of solid matter, which, as every chemist will understand, is practically nothing. This extremely pure water has, however, like all distilled water, a peculiar smoky taste. To remove this taste it is passed through an animal charcoal filter. How the animal charcoal acts is not very clear. The filtered water proved on analysis to contain about four grains and a half per gallon of solid matter, chiefly phosphate of lime. It was free from the flat and smoky taste of the distilled water, and we need not say that, dietetically, it was perfectly pure. No other water is used in the works.

Carbonic acid is prepared by a continuous process in a very large pair of Mondollot generators, made by Mr. H. Favarger of London. In this apparatus, which possesses considerable advantages over all others, the sulphuric acid is introduced by a leaden syphon, which ensures regular action and avoids all waste. The gas passes through two washers, the second of which is a glass globe in which the transmission can be watched, the aeration being afterwards effected in the usual manner. Every care has been taken to avoid the possibility of mineral or other contamination, and it is certain that no purer or more trustworthy beverage could be produced.

Considerable variety is, of course, introduced into the articles sent into the market. First, we must notice Puralis, which may be described as filtered and aerated distilled table water. Then there are the usual soda and potash waters, each of which was found by analysis to contain the proper quantity of the alkaline carbonate. More novel are the aerated quinine water, which contains in each bottle a definite quantity of the soluble sulphate, and the ginger ale, ginger punch, and ginger gin. These last are excellent preparations, which will be valuable to the army of temperance advocates, inasmuch as they are not only pleasant in themselves, but they suggest alcoholic flavour without containing alcohol.

"THE METAPHYSICS OF NATURAL HISTORY."

To the Editor of The Lancet.

Sir,—Accept my thanks for your comments in your last issue on my lately published lecture on the above subject. That lecture is there regarded almost exclusively as an endeavour to reconcile religion and science. That such may be its tendency, I earnestly desire. But to readers of your journal, and to students generally, there is a preliminary and more immediate question. How far are we entitled to declare that there must be a certain form of energy, directivity, or determinism existing in the field of nature, which can be so tracked, step by step, from the commonest physical changes, through elementary biologic provinces into the territories of reflex action, instinct and deliberate intelligent volition, that its unity of nature is beyond dispute? That however humbly or highly developed, or differently conditioned in its modes of expression, it may be, this energy of governance is one and the same? How far must the doctrine of correlated forces be modified so as to embrace what would now be called metaphysical causation? An influence, quite outside any will of its own, determines the sex of a child before its birth. At ten years old that same biologic influence is impressing modifications upon the characters of the child through its bodily constitution; it is a boy in mind and will, because it is a boy in body; at thirty years old intelligent volition has assumed predominance; but we know well enough how deeply all is still dependent on purely biologic antecedents. Here, then, is change simply biologic eventuating in intelligent will-force without a discoverable break. And more, the original life-movement may itself be traced backwards and found rooted in physico-chemical conversion of food; and in an upward direction we go on step by step to emotions, affections, and moral cerebration. This continuity may be inexplicable, but is it not certain? Again, in my tiny book I have dared, *rubesco referens*, to assume that there may be some truth in electro-biology, absurdly so-called, and in spiritualism, equally misnamed. Where more hopefully than among the mass of your readers may one seek for assistance on this point? Can any of them produce evidence that will-force can, or will, accomplish physical results? Your friendly criticism, and that of others, has shown that these views of the subject have been inadequately brought forward in the lecture. A page or two of appendix may somewhat remedy this in a new series now preparing by Messrs. Lewis.

I am, Sir, yours obediently,

March, 1885. Stephen Monckton.

Royal Institution.—The following are the lecture arrangements after Easter:—Professor Gamgee: Eight lectures on Digestion and Nutrition, on Tuesdays, April 14th to June 2nd. Professor Tyndall: Five lectures on Natural Forces and Energies, on Thursdays, April 16th to May 14th. Professor Meymott Tidy: Three lectures on Poisons in relation to their Chemical Constitution and to Vital Functions, on Thursdays, May 21st, 28th, and June 4th. Mr. W. Carruthers: Four lectures on Fir Trees and their Allies in the Present and in the Past, on Saturdays, April 18th to May 9th. Professor Odling: Two lectures on Organic Septics and Antiseptics, on Saturdays, May 16th and 23rd. Rev. C. Taylor: Two lectures on a lately discovered Document, possibly of the First Century, entitled "The Teaching of the Twelve Apostles," with illustrations from the Talmud. The Friday evening meetings will be resumed on April 17th, when Professor S. P. Langley, of the Alleghany Observatory, Pennsylvania, will give a discourse on Sunlight and the Earth's Atmosphere.

THE LANCET.

LONDON: SATURDAY, APRIL 4, 1885.

THE action which has been taken by the vestry of St. Pancras, and which has led to the resignation of Mr. SHIRLEY MURPHY, brings into special prominence the unsatisfactory position in which medical officers of health are placed with regard to the sanitary authorities whom they serve. It is a fact too well known to require any further proof that in a great many instances sanitary authorities intimate to medical officers of health, either directly or indirectly, that the less they do towards the improvement of their districts, the more secure will be the posts and the emoluments they hold. And, on the other hand, the officer of health who honestly performs his duty, and makes it his first consideration to deal with all matters affecting the health of the public, quite irrespective of the private interests which are involved, often finds that his position is made so disagreeable that he is bound to resign it; or else, when the time of re-election arrives, he is thrown over and a new officer takes his place. Nothing could be more unsatisfactory than such a condition of affairs, and the time has come when all who are interested in the future sanitary welfare of the country should make it known in an unmistakable way that a change is necessary in the direction of placing the medical officer of health on a more secure footing.

When the appointment of medical officers of health became compulsory throughout the country, the Local Government Board issued certain regulations with regard to such of them as held office under their Orders; and it is quite clear, from the wording of the clauses relating to the tenure of office, that the intention of the central authority was that after a certain period of probation the election should be permanent, unless removal from office was sanctioned by the Local Government Board on the application of the authority. Indeed, the only limit to the length of appointment had reference to the first election, which was to be for a period not exceeding five years. But even as regards appointments which are made under the Board's Order, the number in which permanency has been sanctioned is very small; and, as a matter of habit, even those sanitary authorities who desire to make permanent appointments are not allowed to do so. As to those districts in which the authorities do not claim any repayment of the officer's salary from the Parliamentary grant, no guarantee whatever is required as to tenure of office, and officers of health may be appointed and dismissed as often as the authorities choose. The metropolis, owing to its exceptional legislation, is on the same footing, and any officer can be got rid of, either directly or by persecution, as soon as the authority finds that in the proper performance of his duties he is touching individual interests.

For the purposes of the Poor-law Medical Service, it was found necessary to give to the medical practitioners holding office in that service some security that they should not be dismissed without adequate reason; and though it may be that this provision has not always worked satisfactorily, yet it has enabled many officers to perform their duties fearlessly, and with the conviction that there was at least some court to which there was appeal. In the interests of public health, it is necessary that medical officers of health should be placed on a footing, to say the least, not inferior to that of Poor-law medical officers; and strong representations should be made to the Government and to individual members of Parliament with a view of securing some such end. The loss to a sanitary district of a medical officer of health who is fully acquainted with its various needs, who has shown his ability to indicate those needs and to secure their remedy, and who is sacrificed because of his very efficiency, is well-nigh irreparable; for even if his successor be as competent as he, much time must elapse before an in-coming officer can have acquired the local information necessary to the proper performance of his duties. In Mr. SHIRLEY MURPHY's resignation St. Pancras is the principal sufferer; and the mere fact that certain members of the vestry have been allowed so to behave towards that gentleman as to compel his resignation will, it is certain, most seriously affect the future sanitary status of any man who cares hereafter to take upon himself the duties of medical officer of health in that parish. The Parliamentary Secretary to the Local Government Board has borne testimony in the House of Commons to Mr. SHIRLEY MURPHY's conscientious and capable performance of duty; the Mansion House Council on the Dwellings of the People have publicly protested against the treatment he has received; and it is to be hoped that the publicity which has been given to this case, one out of many similar instances, will in the end lead to a change in the relations of medical officers of health to the local authorities, both in the metropolis and elsewhere. If this result be attained, those who have suffered will not have done so in vain.

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THE debate on Cholera was resumed at the Royal Medical and Chirurgical Society last Tuesday, and brought to a conclusion, although an attempt was made to have it further adjourned, in order, as one speaker stated, to secure opportunity for Dr. KLEIN to reply. The rules of debate do not, however, admit of a reply except to the opener, and in the opinion of the majority the subject has for the present been sufficiently discussed. Dr. HENEAGE GIBBES denied categorically the interpretation placed by Mr. WATSON CHEYNE upon KOCH's statement that the ileum in acute cases contains comma bacilli in pure culture; for, according to Dr. GIBBES, the small straight bacilli which he finds to predominate in such cases are specifically distinct from the curved microbe. Neither could he confirm the statement that the number of comma bacilli was in proportion to the severity of the case. Dr. HERON, who spoke later in the evening, reverted to the bacillar question, and maintained that no difference of opinion had been elicited as to the fact that KOCH's bacillus had occurred in any other disease but Asiatic cholera; although, as Dr. THIN remarked, an impression had been conveyed that Dr. KLEIN still maintains the contrary. Dr. THEODORE ACLAND asked for information on this point, but, as Dr. GIBBES had left the room and Dr. KLEIN was not present, no reply was forthcoming. But, assuming the truth of his interpretation, Dr. Heron pointed out the great importance of this fact as a means of diagnosis between Asiatic cholera and allied diseases, following in this the opinion long since expressed by Koch, at whose instigation so many sanitary officers and others have been instructed at Berlin in the methods of discriminating the choleraic microbe. Sir Guyer Hunter took occasion to reiterate his conclusion that in the Egypt epidemic the disease was not imported from India, nor did he believe that the Toulon outbreak was imported. In fact, he declared stoutly in favour of the non-contagionist doctrine, which Dr. Cuningham has so persistently upheld. Yet, in the face of such facts as those furnished by Mr. Macnamara in his able speech, and those included in the trenchant criticism lately bestowed on Dr. Cuningham's own reports by the writer of a pamphlet entitled "On the Communicability of Cholera by Human Intercourse"—an author who is in a position to speak with authority,—it does seem astonishing that the non-contagionist doctrine should still receive so much support. Surely there is abundant evidence for regarding cholera as on the same etiological footing as typhoid fever. Mr. Macnamara appears in practice to have found that the most appropriate treatment is just that which Koch finds obnoxious to the bacillus, and is therefore all the more inclined to accept the interpretation of Koch in its most extended significance. Other speakers were less assured that the bacillus stands in causal relation to the disease. Dr. Pye-Smith contributed some weighty remarks upon the nature of the choleraic discharge, which, from experiments made in conjunction with Dr. Brunton, he believes to be due to an outpouring of intestinal secretion by paralysis of mesenteric nerves in connexion with ganglia derived from the solar plexus. As might have been expected, much was said about treatment; and Dr. Johnson's advocacy of elimination by means of mild purgation was attacked by many, including Sir Guyer Hunter, Dr. John Murray, Mr. Macnamara, and Dr. Scriven; although the latter declared that he had found calomel most useful in the early stages. Other statements of Dr. Johnson were combated; but he defended his position with vigour in the short time left to him at the close of the protracted meeting.

Dr. George Peabody, Physician and Pathologist of the New York Hospital, read a paper to the Practitioners' Society on the 6th of March on toxic enteritis caused by corrosive sublimate as a surgical and obstetric application. He adduces from the records of the New York Hospital accounts of eleven cases in which the use of the perchloride as an antiseptic dressing or application was followed by obstinate diarrhœa, which did not yield to the usual remedies, which sometimes ceased on the drug being discontinued, but which in seven instances was followed by frequent bloody discharges, griping, tenesmus, prostration, and death. He was led to search out the facts by reading an article by Dr. Eugen Fraenkel in the February number of Virchow's *Archiv*, whose attention had been drawn to the subject by reading a short communication in the *Centralblatt f. Gynäkologie* by Stadfelt of Copenhagen, in which is reported a fatal case of poisoning in a woman who was treated, after retained placenta had been removed with the hand, by the washing out of the uterus with a solution of corrosive sublimate of the strength of 1 in 1500. Four hundred cubic centimetres of this solution had been injected into the uterus, when sudden collapse occurred, from which she rallied. On the evening of the same day she had diarrhœa and tenesmus, and later, bloody stools, which continued until her death, ten days after. The autopsy showed numerous ulcers of an irregular or circular shape in the large intestine. The mucous membrane generally was congested and the ulcers frequent in the rectum. These appearances of the intestine corresponded closely with what was noticed by Dr. Peabody in several of the autopsies he made of surgical cases where the bichloride had been used, as for irrigating abscess cavities, irrigating wound after amputation of the breast, irrigating a suprahydatid cyst; wiping the peritoneum after laparotomy for fibro-myomata with sponges wet with bichloride solution, 1 to 2000 parts. Fraenkel says he has made autopsies of fourteen cases treated by Schede with bichloride during the last two years and a half, in which toxic enteritis was produced by it. Of these fourteen cases, two, he thinks, were killed by the poison directly. In the others the drug did not seem wholly responsible for the fatal issue. Salivation is exceptional in these cases. Inflammation is always present in the large intestine, but only exceptionally in the smaller. In the large intestine Fraenkel found very extensive superficial ulcerations, sometimes covered with loose masses of epithelium and sometimes by a torn diphtheritic membrane. The lesions of pyæmia in other organs are uniformly absent. Dr. Peabody refers to a publication by Schede of Hamburg on this subject in *Volkmann's Sammlung Klin. Vorträge*, No. 251, and also to one in the same work, No. 250, by W. Thorn, assistant at the Female Clinic in Halle, which is an urgent plea for the total abolition of the corrosive from midwifery and gynæcology, alleging its great inferiority to carbolic acid, and the dangers attending its use. We think it incumbent upon us to give publicity to these publications, as we have lately recorded with much satisfaction the remarkable absence of mortality in the General Lying-in Hospital of York-road, Lambeth, where the patients are douched with solutions of the bichloride twice a day. These, of course, are only vaginal douches. We have been informed that there was, except possibly in one case, an entire absence of any indication of the constitutional action of the poison. It is clear, however, from surgical experience that this solution will have to be used very cautiously, and not less so in obstetric practice. We should be disposed to say that its intra-uterine use is not warranted. There is a growing disposition, except in extreme cases, to trust to vaginal cleansings.

The Government Lunacy Bill is not yet printed, so that it is not possible for us to discuss its provisions in detail. So far as we can judge from the statement made by the Lord Chancellor when introducing it, the measure would seem to be one of those well meant but feeble endeavours to do right which reflect more credit on the hearts than on the heads of their projectors. Of course, it may be that in this instance the head has had more to do with the matter than the heart, and that, in point of fact, it is a concession, with ingenious reservations, made to the urgent cry for reform. We do not attempt to determine in which light the new

Lunacy Bill is to be regarded. One thing, however, is certain; an attempt must be made to improve it by amendments. In some respects this should be easy. For example, the provision by which a person consigned to an asylum is to be visited by a delegate of the Commission within a *month* (!) of his admission must obviously be so modified that the official visit shall be paid within a week as the utmost limit. If the examination and report thus made are to be of any value they must be completed at the earliest practicable date. Imprisonment of a weak-minded though not insane person for a month in an asylum would more than suffice to drive him into madness. Even three or four days of wrongful incarceration would do the utmost mischief in a great majority of instances. If the official representing the Commission, and therefore *supposed* to be impartial, does not visit within one week, it is needless to trouble to send him at all; the alleged lunatic will be quite mad before he comes! We do not complain that the Government has hesitated to abolish the private asylum system altogether with one sweep of the pen; but the Bill, as represented, trusts largely and implicitly to the energy of local reformers for its efficiency, and everything will depend on the way its provisions are carried into effect. We suspend our judgment on the details of the measure until we see it in print.

WE drew attention in our issue of March 7th last to the proceedings of the Metropolitan Asylums Board in connexion with the excessive expenditure at the Homerton Fever Hospital, and especially to the resolution which was passed by that Board to the effect that the result of the inquiry of the subcommittee showed the unfitness of the present medical superintendent for the office he holds. Dr. COLLIE has raised a protest against this resolution, and he naturally expresses surprise that it should have been passed without his having an opportunity of offering to the Board of Managers the explanations which he now tenders. The charges which, in the opinion of the managers, have reference to Dr. COLLIE arrange themselves under four heads. In the first place the general expenditure of the establishment is regarded as excessive. As to this Dr. COLLIE shows clearly that, except in so far as he has advised the carrying out of certain important and necessary improvements, such as alterations in the system of drainage, he is in no way responsible for such expenditure. The general expenditure, he declares, is controlled and directed solely by the hospital committee; and, except on rare occasions, when some special medical questions arise, the estimates are dealt with without so much as his being consulted. Another and a very important charge relates to the amount of stimulants given to patients. On no subject has there probably been a greater divergence of opinion in medical circles than on this question of the administration of alcohol in the case of the acute specific fevers, and therefore the mere citing of the amounts of wine, &c., administered per patient at different hospitals is altogether beside the mark when the point under consideration is the fitness of this or that practitioner efficiently to supervise a large fever hospital. The matter is one for medical judgment, and we are bound to say that Dr. COLLIE who has often expressed his views upon what has by some been regarded as his lavish use of alcohol, bases his practice upon what he rightly believes to be the only proper ground—namely, the welfare of the patient. Indeed, in *support of his method of treatment he gives the mortality* per cent. of admissions during the last twelve years in the Stockwell Fever Hospital, in the London Fever Hospital, and in the Homerton Hospital, and the result is that on a total of patients varying from 1797 in one to 3604 in another of the hospitals, the death-rates have been at Stockwell 21·54, in the London Fever Hospital 16·14, and at Homerton 15·15 per cent.

We are not now, however, concerning ourselves in any way with the question whether Dr. COLLIE's method of treatment is right, or whether sources of error may not have to be eliminated before the figures he quotes can be accepted as proving all he alleges. The point is that he honestly believes he saves life by his alcoholic treatment, and that he is able to quote statistics which he holds are in favour of his confirmed opinion. So long as this is the case it is only right that his medical judgment should be unhindered, and it is clear that on this, as also on the first head, he entirely absolves himself from the charge brought against him. A third point relates to the supply of stimulants to the staff. Some of this has been granted without any order from Dr. COLLIE, and some of it he has "years ago" declined to hold himself responsible for. There has also been some exceptional use of beer on account of the works of drainage which have been carried out. It was naturally desired to keep the men working in an infectious hospital from the neighbouring public-houses, and hence beer, as also lemonade, were provided for them. But even here Dr. COLLIE declares that he never ordered an ounce of the beverages, neither was he concerned with the quantities issued. The remaining item under this heading Dr. COLLIE regards as one coming properly within his jurisdiction. It has relation solely to the sick members of the staff, and, having regard to the heavy nature of the duties they had been called upon to perform, Dr. COLLIE declares that under similar circumstances it would be his duty to act in the same way again. Here again the matter is one essentially for the judgment of the responsible medical head. The last charge is of a different character. Excessive amounts of Beaune wine were delivered to a certain ward early in July last year. Dr. COLLIE admits that it was his duty to have checked this, and that he is properly to be held responsible for what was unquestionably a grave irregularity. But he submits that at the time in question he was engaged on many other matters for the board of managers, that the diet sheet was made up by the *superintendent nurse owing* to the illness of one of the medical officers, and that he is in consequence unable to offer any satisfactory explanation of the circumstance. Clearly Dr. COLLIE has erred here. But surely the past history of his services should afford ample proof that the matter is one of error alone. For a long time past the expenditure of Homerton Hospital has at intervals been considered, the cost of the establishment has been submitted to the managers fortnight by fortnight, and never during the past fourteen years has Dr. COLLIE received a hint, a caution, or a warning that his medical administration was too costly. During his long service he has received numerous proofs of the confidence of the managers in his ability as an administrator. Apart from his general work, he has been called upon to prepare land and floating hospitals against epidemics of small-pox, special recognition of his exceptional services has been made to him, and he has all along been regarded as one of the highest authorities on the subject which he has made his particular study. Should Dr. Collie feel that, in the present attitude of the Managers, he can no longer hold his present post, the metropolis would lose the services of one of the most able physicians who ever set himself to cope with the control of epidemic disease by isolation; and we cannot but express a confident hope that his explanation will be accepted as sufficient, and that he will continue to hold the post for which he is so exceptionally well fitted. A Local Government Board inquiry has been ordered as regards the whole subject, and this will probably clear up all doubt as to where the fault lies.

Annotations.

"*Ne quid nimis.*"

ROYAL COLLEGE OF PHYSICIANS.

The Comitia on the 30th ult. was very largely attended, Sir W. Jenner presiding. The Certificate of Hygiene was awarded to Messrs. Charles Bullock, Charles W. Low, William F. Taylor, and Francis J. Tuohy, this being the first occasion of the newly established examination. A communication was read from the Treasury undertaking to comply with the request of the College to distribute free of cost amongst the medical practitioners of the United Kingdom copies of the revised "Nomenclature of Disease." A vote of thanks to the Treasury for its courtesy and liberality was proposed by Sir Risdon Bennett, seconded by the Senior Censor, Dr. Ogle, and unanimously carried. The President intimated that at the next meeting he should propose that an honorarium be voted to Dr. Ord, the Secretary of the Nomenclature Committee, for his invaluable services. The scale of payment of examiners was submitted and approved. Dr. George Johnson drew attention to the proposed publication in facsimile of the MS. notes of Harvey in the British Museum, and a committee consisting of Drs. Johnson, Sieveking, Stone, Payne, and N. Moore was appointed to report thereon to the College. Sir W. Jenner then delivered an address, in which he reviewed the various subjects that had occurred in connexion with the College during the past year. Amongst these he referred to the Medical Bill, and its withdrawal owing to the determined opposition of the Scotch universities, and stated that the measure had received the support of the College, which was more mindful of the interests of the profession and the public than of its own corporate interest. Since the Bill had not become law, the College had, in conjunction with the College of Surgeons, formed an Examining Board, which had received the sanction of the Medical Council. Objection had been taken to the fees charged for these examinations; but until the scheme was well established, it would not be possible to lower them. The question of a London medical degree was one which might well be entertained in connexion with the new board, and he thought the College might institute an inquiry into the best means for obtaining the power to grant degrees. Many other topics were dealt with, and the address concluded with a review of the careers of those Fellows who had died during the past year—an eloquent tribute, characterised by much discrimination and high-toned feeling. A cordial vote of thanks for his address was passed to Sir William Jenner, who was then re-elected President by a large majority, a certain number of votes being also recorded for Sir W. Gull, Sir H. Pitman, Dr. Owen Rees, Sir A. Clark, Dr. Quain, Dr. Wilks, and Sir Joseph Fayrer.

ENGLISH VITAL STATISTICS IN 1884.

The Registrar-General's Abstract of Marriages, Births, and Deaths, registered in England and Wales during 1884, has just been issued as a Parliamentary Return. The marriages were fewer than those recorded either in 1882 or 1883, and were equal to a rate of 15·1 persons married per 1000 of the estimated population. This marriage-rate was as low as that in 1881, and very slightly above the low rates in 1879 and 1880, when the present depression in the marriage-rate was most marked. In sympathy with the long continued depression of the marriage-rate, the birth-rate is also much depressed, and did not exceed 33·5 per 1000 last year and showed but a slight recovery from the exceptionally low rate in 1883; it was 1·4 below the mean rate in the ten years 1874-83. The deaths registered last year were equal to a rate of 19·6 per 1000, and was almost identical with the rates in the preceding two years, 1882 and 1883, which were 19·6 and 19·5. The mean annual death-rate in the first four years of the current decennium was but 19·4 per 1000, and was no less than 2·0 below the mean rate in the ten years 1871-80, in the latter half of which period a considerable decline in the national death-rate had already set in. The marked decline in the death-rate of the last four years signifies that nearly 213,000 persons in England and Wales survived those four years whose deaths would have been recorded had the death-rate equalled the mean rate that prevailed during the preceding ten years. The natural increase of the population of England and Wales last year by excess of births over deaths was 376,623, and was higher than in any previous year on record, except 1881, when the death-rate was unprecedentedly low. On the other hand, 150,652 English emigrants left the United Kingdom during the year (fewer by 19 per cent. than those in the previous year), whereas the number of immigrants and of returned emigrants is unknown. The net increase to the population of the country cannot therefore be ascertained. From a health point of view the vital statistics of 1884 were eminently satisfactory, and the continued depression in the low marriage-rate, viewed as the reflex of the commercial depression, was to some extent counterbalanced by the decline both of emigration and of pauperism.

ALLEGED DEATH FROM VACCINATION.

On Saturday, March 28th, Dr. Danford Thomas, the coroner for Central Middlesex, held an inquiry into the cause of death of a child named Walker, aged three months. From the evidence it appears that deceased was vaccinated by Mr. Claremont, public vaccinator to the St. Pancras district, on March 5th. At that time it seemed quite healthy. On the 12th—the day being very cold—it was taken for inspection. Two days afterwards the mother called in Mr. Whitefoord of Albany-street, and that gentleman diagnosed "*congestion of the lungs and brain.*" Death took place from convulsions on the 22nd ult. Mr. Whitefoord signed a certificate to the effect that the fatal issue was due to vaccination, blood poisoning, and convulsions. Upon the information laid before him the coroner very wisely determined to hold an inquest. The post-mortem examination was performed by Mr. Pepper, in the presence of the gentleman named above, Mr. Sweeting of the Local Government Board, and other members of the profession. The vaccination marks were perfectly normal, there being not the least trace of ulceration beyond the adherent scabs. The surrounding areolar tissue and the axillary lymphatics showed no trace of suppuration. The internal organs, with the exception of the lungs and brain, were free from disease. There was no sign of acute fatty softening or other result of septic intoxication or infection, no thrombosis or hæmorrhagic infarction. There was no effusion into the joints. The lungs showed acute capillary bronchitis, and patches of collapse consequent on the obstruction to the passage of air from the blocking of the tubes. There was no pneumonic consolidation. The pia mater was infiltrated with puro-lymph; the middle ear was healthy; no evidence of tuberculosis was discovered in any part of the body. On being questioned by the coroner and jury, Mr. Pepper stated that in his opinion vaccination had no other part in causing the death than that for the time being it somewhat depressed the vital powers, and so rendered the tissues more vulnerable; and, further, that the capillary bronchitis and pia-meningitis were in all probability directly due to exposure to cold. With regard to the latter lesion, he deposed that inflammation of the cerebral meninges was not uncommon in young children apart from vaccination or any other discoverable source of local irritation. Mr. Sweeting testified to his having examined the vaccinifer—a perfectly healthy child exhibited in court,—its vaccinifer, and about thirty other children vaccinated from them, and that in only one case had the arm assumed unhealthy action, and that as the result of an attack of measles contracted four days after vaccination. By Mr. Whitefoord's certificate, it would seem that he intended to convey that vaccination had in some way led to septic poisoning, and so to the death of the deceased; but when submitted to interrogation, Mr. Whitefoord had no hesitation in saying that by "blood poisoning" he meant only the ordinary effects of arm-to-arm vaccination, which he considered an undesirable method of procedure. To our minds the public and the profession generally would be led to draw a very different conclusion from the terms of that certificate, and the jury by their verdict recorded their sense of disapproval of Mr. Whitefoord's nomenclature when they found his certificate "misleading and incorrect." We do not think that Mr. Whitefoord can claim to represent the opinion of his professional brethren in considering that the "congestion of the lungs" was due to blood poisoning, and not to exposure to cold, on the grounds that the appetite of the patient was not completely lost, and that there was no difficulty in breathing. The latter statement of fact, however, was directly traversed by the mother of deceased, for she avowed that one reason why she sought medical advice was on account of the difficulty of breathing which Mr. Whitefoord failed to recognise. As regards arm-to-arm vaccination, it is only necessary to add that the Local Government Board have issued instructions that it is preferable to vaccination by ivory points. The wisdom of such instruction seems plain enough. The virus when exposed has a chance of undergoing decomposition, which, although it may attenuate the specific principle, opens up the possibility of introduction of septic matter. Besides, it has been proved by experiment that it is impossible to remove the whole of the virus from the points, as some of it passes into the pores of the ivory. We cannot help expressing our conviction that Mr. Whitefoord should have more carefully weighed the probabilities as to the construction likely to be placed on the wording of his certificate. The cause of vaccination has enough to contend against without its opponents being furnished with phraseology which does not convey a complete representation of facts, and, as in this case it seems, not even a correct statement of opinion.

ATHETOSIS BEFORE AND AFTER HEMIPLEGIA.

THE relations of convulsion to paralysis form one of the most interesting chapters in the pathology of the nervous system. The popular mind sees a wonderful contrast between convulsion and paralysis, and with good reason. Yet there are many considerations which tend to diminish the contrast. The causes which give rise to involuntary movements need only to be intensified in order that paralysis may result. A moderate defect in the nutrition of nervous tissues subserving motor functions may be outwardly expressed as epilepsy, chorea, or some other form of involuntary movement; whilst a more marked defect in the nutrition would be followed by paralysis. It is true that in many instances genuine irritation calls forth some form of tonic or clonic spasm, which may end in paralysis from exhaustion consequent on the excessive irritation. Perhaps the majority of cases of Jacksonian epilepsy which are followed by paresis may be thus explained, though it is highly probable that a condition equivalent to irritation may be set up as the result of a mere loss of nutrition. Paralysis which is not caused too rapidly is generally preceded by some form of spontaneous movement. At a recent meeting of the Société de Médecine et de Chirurgie of Bordeaux, M. Durand related the case of a man aged sixty-nine who was one day seized with severe epistaxis. The next day a tremor exactly similar to that seen in cases of post-hemiplegic athetosis was observed in the left arm and leg; at least so states the report from which we gather this account. There was no loss of consciousness. A day later the convulsions were replaced by hemiplegia. On the following day the movements had returned, and hemianæsthesia was detected in the convulsed members. The further history of the case was not related, and the description given of the movements is inadequate for a proper recognition of their nature; nevertheless the case is an interesting one.

THE MORTALITY OF PIT VILLAGES.

THE report of Dr. Brown, the medical officer of health of the Winlaton Rural District and of the Blaydon and Pyton Union Districts, has been kindly forwarded to us. It should be widely circulated in the district of Newcastle, as throwing much light on the causes of death that obtain still in villages and small communities in the very heart of the district which is associated with all that is effective in engineering and mechanics. If a little of the genius that has been so lavishly spent on the means of locomotion could only be spared for increasing the means of life, or rather abating the causes of death, what great results would accrue. How much healthier the children would be, and how much happier the parents. Life itself would be ever so much more worth living if the diseases by which it is blighted and impoverished from infancy upwards could be curtailed or abolished. If untainted water could be supplied and the house space increased, infantile diarrhœa and typhoid would largely disappear, and the insidiously introduced infection might have some chance of isolation. If the Blaydon Sanitary Authority is disposed to effect these beneficent changes, it need do no more than read Dr. Brown's report and act upon its suggestions. The significance of much of the disease of which he speaks is unmistakable. Twenty-one deaths in a population of 11,800 from summer diarrhœa; 45 deaths, *in the third quarter of the year*, under five years of age, in a total of 77 deaths; 14 deaths from enteric fever at Blackhall Mill; 68 victims to lung disease, being nearly one-fourth of the whole number of deaths, and 60 deaths of infants: from thrush, 8; tabes, 10; meningitis, 12; convulsions, 18; and premature birth, 12—convey to the medical mind conditions of existence which not only kill, but which debilitate and impoverish those who survive. The mortality of the whole district is that of a crowded city rather than that of rural villages. We will not here reproduce Dr. Brown's account of the water-supply and its intimate relation with wells and ashpits and privies. His language is not that of a sensational alarmist, but of an earnest and kindly physician; and we cannot but hope that it will have the attention of his sanitary authority; and let us hope, also, of beneficent ladies of the district, who, with a little pains, might diffuse among the people intelligent ideas of food, fresh air, housekeeping, &c., pending the arrival of that period described by Dr. Brown when the School Board authorities will think it a fundamental part of their duty to instil into the juvenile minds under their care elementary ideas of health and its conditions.

SUCCESSFUL NEPHRECTOMY AND NEPHROTOMY.

A MAN, aged twenty-seven, has just left the Queen's Hospital, Birmingham, in capital health after removal of his greatly enlarged right kidney by Mr. Jordan Lloyd. The patient had suffered periodically from attacks of right nephralgia for nineteen years, and several experienced practitioners had diagnosed renal calculus. On Nov. 18th, 1884, the kidney was exposed through the loin, its substance incised, and its cavity explored with the finger. The kidney was found enlarged, dilated, and pouched, but without stone. Twelve days later the patient had an attack of nephralgia, followed by a kind of pyæmia. The wound at this time had nearly healed. The general health had so far improved that on Feb. 8th Mr. Jordan Lloyd excised the kidney, through a wound made in the old cicatrix. The gland proved to be greatly enlarged, but its substance was thinned and dilated, without stone. The kidney measured eight inches in length, and the pelvis twelve inches in circumference. The patient rallied quickly, made a rapid recovery, and was discharged on March 19th, with a small discharging sinus in his loin, but otherwise, to all appearance, in perfect health. *La Gazzetta degli Ospitali* reports that on March 8th Professor Vincenzo Dafilo performed nephrotomy at the Ospedale degli Incurabili at Naples for suppurative nephrosis. The walls of the cyst, about three-quarters of an inch in thickness, were closely adherent to the lumbar muscles, the peritoneum, and the diaphragm. The edges of the wound in the skin and cyst were united by points of interrupted suture. The cyst, which had previously been evacuated eight times with Potin's aspirator (yielding a pint and three-quarters of purulent liquid each time), was again emptied in the same way on March 8th. The free extremity of the twelfth rib was resected at the same time. The operation was completed under ether in forty minutes, with the strictest Listerian antiseptic precautions. The temperature has not exceeded 38° C., and the patient is making excellent progress towards recovery.

MALE NURSES FOR MEN.

THERE is some reason in a suggestion which has lately come under our notice, that greater facilities than exist at present should be afforded to steady and intelligent men who are willing to devote themselves to nursing the sick of their own sex. That some such nurses are to be found is not denied. Among others, we may mention the male attendants on lunatic patients—men skilled in the management of a special and very trying form of disease; then there are the "watchers," who belong to the Jewish community, and combine the office of a nurse with certain religious functions. Still, the suggestion we have referred to indicates a want in our system of treatment. It would be easy to enumerate cases in which the services of men would be preferable to those of women in a sick room. In old age, for example, when prostatic and vesical troubles are apt to show themselves in men, or at any age for the after-care of operations in the same region, one may, without excessive refinement of feeling, choose that the necessary manipulations should be performed by the male hand when that has by training become endowed with feminine tenderness. It must, of course, be admitted that true delicacy of feeling is quite compatible with every necessary work, and particularly with one so humane as that of attendance on illness; but there seems no reason why an invalid should not be able to satisfy his own wish in the matter. Another and more pressing argument in favour of male nursing is founded on the greater physical strength and endurance of men as compared with women. Many non-professional persons have witnessed the real advantage conferred by muscular strength—in dealing, for example, with paralysed patients. To lift a heavy man bodily is no trifling task even for the strong. In some cases it is frequently necessary; and it seems somewhat unfair to expect that women of exceptional strength should always be available for such an emergency, or that the aid of another woman or a male relative of the invalid should be conveniently near to make up any deficiency, when many men, if trained, could satisfy every requirement single-handed. Some of the general hospitals would, therefore, we think, do well to assist the formation of a nursing staff of men by using for this purpose the means of teaching which their wards so amply afford. Recent experience has proved that if the course of education could be made to include ambulance work, a reserve force of assistants might be formed whose services would be of great value to the military authorities in case of war.

HORSEFLESH AS FOOD IN MANCHESTER.

THE question as to how far the consumption of the flesh of diseased animals may be carried without injury is one which cannot yet be answered with exactness. Probably it never will be. It is obvious notwithstanding that such meat can never be relied upon to furnish the same nutriment as that of a sound and well-fed animal; and again, that so long as the muscular tissues are traversed by the same organic fluids as the seats of disease, especially if the latter be contagious, they cannot be eaten without risk. A partial security is afforded no doubt by bleeding the carcase efficiently, by using as food only the muscular tissues, and by thorough cooking. None of these, however, can do more than mitigate the probable ill-effects of such haphazard feeding, and the danger thus incurred is proportionately enhanced by the fact that many of the poor upon whom such fare is apt to be foisted content themselves with eating the liver and other viscera, which are particularly apt to suffer from infectious processes within the body. These considerations will help us to understand what is, or at least may be, implied in a statement recently published that horseflesh is being sold in large quantities to the poorer inhabitants of Manchester, under the name of beefsteak, and, further, that many of the slaughtered horses were believed to be diseased. The Local Government Board have properly taken the matter in hand, and will, we hope, succeed in excluding from the market of a prosperous English city a form of food which even in its healthy state is not looked upon with favour as a staple of our national produce.

ALBUMINURIA IN CATS.

THERE frequently exists in the kidney of the cat an enormous accumulation of fat in the cells of the parenchyma. The question has been debated whether this fatty degeneration is pathological or physiological. M. Mathis believes the condition to be abnormal, though of frequent occurrence in cats. The disease is of a different order from that of ordinary Bright's disease; it is not the result of an inflammation, but is due to excessive storing up of the fat—a function which appears to be normal for the kidney of the cat, just as the subcutaneous and subperitoneal tissues are the usual magazines for the storage of fat in other animals. Excessive accumulation in the kidney leads to interference with the function of secreting or excreting urea, and it diminishes the power of taking up the albumen thrown out from the blood in Bowman's capsule. The result appears to be the same as in ordinary Bright's disease, "if we except," says M. Mathis, "the disorders due to increased blood-pressure." A want of docility, with capricious temper, is believed to be the chief clinical symptoms of the disease in cats, and, according to our author, albuminuria is always found under these circumstances. An account of this steatosis of the kidney may be read in the *Lyon Médical* of March 15th.

THE ROYAL NATIONAL HOSPITAL FOR CONSUMPTION, VENTNOR.

THE Sixteenth Annual Report of this Hospital shows that it is what its name implies, a National one. Of the 6163 patients who have been received into the hospital, about half have come from London and Middlesex. The other half have come from nearly all the counties of England, from Wales, from Ireland Scotland, and the Channel Islands. During the last year no less than 608 patients have been under treatment. But new blocks of buildings, chiefly at the expense of an anonymous friend, are to be opened in the present year, and another block of buildings, to commemorate the generosity of the late Mr. John Jones, is in course of erection. In view of the great importance of the work of the hospital and its imminent extension, it is highly important that the staff of local physicians should be increased. We made this suggestion in a former year, and we make it still more urgently now. It cannot be better carried out than by appointing Dr. Whitehead and Dr. James M. Williamson, who are already Honorary Surgeons, to Physicianships. It is no secret that Dr. Williamson has applied to the board of management to be transferred from the surgical to the medical staff. He states that surgically there is no demand for his services in the hospital, while medically there is a large field for them. His connexion with the hospital, first as resident physician, and then as surgeon, dates as far back as 1873. We should regard his appointment and that of Dr. Whitehead to the Physicianship as not only just to them, but as likely to be advantageous to the hospital. The case of phthisical patients is one demanding much care and time, and these cannot be given with the present staff.

SANITATION AT LEEDS.

THE sanitary supervision of so vast a town as Leeds presents unusual difficulties. A rapidly increasing population, estimated at 327,324, is spread over 22,974 acres of hilly ground, which it has been found necessary to divide into thirteen sanitary districts. A special sanitary inspector watches over each district, and these thirteen inspectors contrived in the course of twelve months to visit 17,011 houses. Considering that 6746 of these houses required sanitary improvement, it will be seen that the inspectors have been greatly overworked. Some of the cases were particularly instructive and significant. Thus, of 3943 houses with defective drainage, zymotic disease occurred in 323 before the evil could be remedied. In one house, to all appearance perfectly drained, there had been case after case of scarlet fever; ultimately it was found that the soil-pipe leaked. In another house, where diphtheria had occurred, a hole was discovered just below the trap of a drain; and this was especially remarkable, as the tenant had recently removed into this house on account of having lost her husband from blood-poisoning due to the defective drainage of her previous dwelling. In the northern district, the family of a small provision shop keeper were attacked by diphtheria. There were four cases in all; the mother and a child died, and the business was almost ruined. Dr. G. Goldie, the medical officer of the borough, has very properly published a coloured illustration of the drains of this house. In four different places the earthenware pipes passing under the house had been chipped; but in order that a two-foot run of piping might not be lost the broken side had been turned upwards. In this way leakage of water might be avoided, but sewer gas could freely escape into the house. Fortunately such trifling with human life could not now be repeated in Leeds. In June, 1878, the present building bye-laws came into force. According to these regulations, all drains must if practicable be carried outside the houses. When this is not possible, they must be laid in concrete and cemented. These works must further be tested and examined by the municipal officers, who insist on their being truly and properly laid, trapped, and ventilated. But if the bye-laws offer some guarantee for new houses, the old houses can only be remedied by the energy of the sanitary inspectors who, we reiterate, are much overworked.

TABETIC LARYNGEAL CRISES.

AT the last meeting of the Medical Society, Dr. W. M. Ord showed a patient the subject of tabes dorsalis, and Dr. F. Semon demonstrated the presence of incomplete bilateral paralysis of the abductors of the vocal cords in this patient. It appears that the stenosis of the glottis has developed and steadily increased during the past three months, whilst the patient has been under observation. The patient at first did not admit that he had suffered in any way from symptoms referable to the larynx; but later on, however, he experienced severe attacks of choking, which at times seemed to call for tracheotomy. Some authorities regard the laryngeal disturbance as being due to a primary contracture of the muscles of the glottis, but the case in question would seem to lend support to Dr. Semon's view of a slowly advancing paralysis of the openers of the glottis. Dr. Ord is in the habit of examining laryngoscopically all cases of nervous disease, and especially of tabes dorsalis, and there can be no doubt of the value of a systematic examination of such cases. For a history of laryngeal trouble may not be obtained, indeed no laryngeal disturbance need ever have occurred, and yet the laryngeal muscles may be obviously affected.

VEGETABLE FOOD FOR CHILDREN.

MR. SAMUEL MORLEY, with his usual public spirit, has been trying to help the cause of temperance and of thrift by a side-stroke in the direction of dietetics. At a vegetarian dinner given by him on Saturday to the villagers of Leigh, he advanced several reasons why this form of food should be more generally appreciated than it is. He referred to a statement that thorough-going vegetarians are usually total abstainers, advised that children should be largely fed on vegetable fare, and advocated the more extensive cultivation of herbs and fruits as being an industry available for very many of the labouring classes, and less tried by competition than that of cereals. Much might be said on each of these heads. Probably the strictest vegetarians are non-drinkers; but this rule is of course not absolute, and temperance, where it prevails, is no doubt partly a virtue of necessity or of inclination, or a principle, and does not arise out of abstinence from meat. In illustration, one might profitably compare the sober and herbivorous peoples of the tropics and subtropic zone with the largely, though not wholly, grain-eating inhabitants of Northern Scotland, whose sobriety is certainly not above question. The most valuable suggestion, however, in this well-timed address is, it seems to us, that which applies to the food of children. The body of the child consists in great measure of fluid and fatty components, and in a comparatively moderate degree of the active muscular tissues. Its income of nourishment, again, goes rather more to the building up of its constituents than to the supply of their functional expenditure. The more inert materials, such as those of bread, are consequently in request for the laying on of substance; the more energising, as those of meat, find proportionally less occupation. We are not vegetarians, and we think Mr. Morley is not strictly such; but we probably agree in this, that for some persons, and especially children, much can be done in feeding with little meat. It is to be noted, also, that a child's food must be abundant in order to fulfil its purpose. How much more easily he may have plenty to eat of vegetable than of mixed or meat diet in the poorer ranks of our countrymen is too obvious to need remark.

THE HEALTH OF OUR TROOPS IN THE SOUDAN.

So far as we have information on the subject, the health of the troops employed in the Soudan has been remarkably good, and the arrangements made by the medical staff for the prevention, so far as possible, of disease, for its treatment when it occurs, and for affording aid to the wounded, have been most successful; indeed, they are described by the special correspondents as "admirable." But we must not lose sight of the fact that a period is now coming on when the resources of the medical service will be very severely tested. The enforced inaction of the troops during the hot season must undoubtedly prove very injurious; and the effects of solar influence on the men who must necessarily be exposed to it cannot fail to tell on the sick-list. This is indeed already beginning to be manifest at Suakim, where during the late operations several cases of sunstroke occurred. We may look for a somewhat heavy list of such cases, and of heat-fever, dysentery, and possibly cholera. A number of cases of enteric fever are already stated to have been admitted to hospital, and there seems too good reason to believe that they will increase as the season advances. It is satisfactory to know that every provision has been made which foresight could dictate; that there is abundance of medical comforts at hand; that adequate arrangements have been made for the careful nursing of the sick; that an ample supply of ice is to be had as required, and that the means of transport in hospital ships fitted up with every appliance for the treatment of the patients and the efficiency of the medical service have been provided on a very liberal scale. We have not the least doubt that everything will be done by the heads of the medical service which practical experience and scientific knowledge can suggest, but we cannot help feeling anxious about the health of the troops during the coming hot season.

SALIVARY CALCULUS IN A MEDICAL MAN.

DR. DE RATO Y ROCES describes in the *Revista Asturiana de Ciencias Médicas* his own case of salivary calculus. When a child the sublingual glands were indurated and painful; afterwards that on the right side disappeared, but the left gland continued to cause trouble, the pain being felt in Wharton's duct, and there being increased secretion of viscid saliva. These symptoms, however, disappeared for a time. For several years, especially during the later months, pain and inflammation have returned, sometimes extending to the right side. After the acute symptoms have subsided a permanent induration has always remained. Last December Dr. de Rato suffered from a more severe attack of this kind than usual, accompanied by repeated rigors, followed by severe pain and febrile disturbance. Afterwards the inflammation extended, and glossitis and amygdalitis prevented speech and the ingestion of food; then came a copious secretion of viscid saliva. By the fifth day, when the inflammation had to some extent subsided, a probe passed into Wharton's duct detected a calculus, which was extracted by forceps the following day. It was of the shape of a date stone, weighed 540 milligrammes (8·37 gr.), and of the hardness of chalk. Externally it was of a dirty white colour with reddish spots, and internally it was white. Since the extraction of the calculus the induration remains, and Dr. de Rato believes there are also small calculi in the duct.

BIRMINGHAM MEDICAL INSTITUTE.

DR. THOMAS UNDERHILL, J.P., presided at the annual meeting of the Birmingham Medical Institute on the 26th ult. The number of members is now 204, and during the past year no less than 597 books have been added to the library, which now consists of 9274 volumes. The annual income is not yet quite equal to the expenditure, but as the building and library are free from debt, the endowment unencumbered, and the number of members steadily on the increase, a growing feeling of confidence pervaded the meeting. Special votes of thanks were passed to the president, the honorary librarians and secretaries, and very important additions made to the committee by the election upon it of Mr. T. F. Chavasse, Mr. Jordan Lloyd, and Mr. Bennett May. One special feature of the Birmingham Medical Institute is that no ballot or other form of election is required to place a registered medical practitioner on the roll of members. The only requisite condition is that he undertake to observe the regulations, and be recommended by six members of the institute, of whom three shall be members of the managing committee. When this very open method was substituted for the ballot previously in force, it was feared by some that undesirable results might ensue; but in practice it has been found that the six signatures required to constitute membership afford all requisite guarantees. For the ensuing year, Mr. Sampson Gamgee was elected president of the institute, and Dr. Rickards and Mr. John Greene vice-presidents. The honorary librarians, Mr. Lloyd Owen and Dr. Saundby, and the honorary secretaries, Mr. W. G. Archer and Mr. Joseph Hunt, were re-elected.

PHARMACY IN BUEÑOS AYRES.

A REPORT has been made by Señor Puiggari to the National Department of Hygiene of the Argentine Republic concerning the state of pharmacy in Buenos Ayres. By means of a legalised system of granting royalties for pharmacies to non-resident proprietors, and by the permission given to medical students of whatever standing to take the title of pharmacist, a number of those establishments at present in the city are practically in the hands of very incompetent persons. In many of them Señor Puiggari found no measures, and in some where such articles existed the person in charge was incompetent to make use of them. The same remarks also apply to reagents. The examination of the drugs, too, pointed to lamentable ignorance or carelessness on the part of many of the compounders. Taking a simple and cheap substance, acid. sulph. dil., which, according to the Codex, should contain 10 per cent. of sulphuric acid, the proportions in a number of samples taken varied between 5 and 23 per cent. Again, liquor arsenicalis, which should contain 1 per cent. of arsenious acid, was found to vary from ·06 to 1·57 per cent. Coming now to an expensive drug, opium, samples which ought to have contained 10, or at most to have varied from 8 to 12, centigrammes of morphia, actually varied from 8 milligrammes to 18 centigrammes, those containing a serious deficiency being much the most numerous. In order to remedy this condition of things Señor Puiggari recommends the abolition of the royalty system, the separation of the faculties of medicine and pharmacy, and that no one should be granted a licence for a pharmacy without the production of his diplomas and other certificates. He points out, also, the extreme facility with which the pharmaeutical diploma is granted in the Medical Faculty of Cordova. The President, having considered this report, tates that it is impossible to veto the royalty system, but orders that the names of all pharmacies of that kind be published twice a year, so that the public may have the means of judging whether an establishment is or is not under competent management.

A COUNTY COURT JUDGE ON THE REMUNERATION OF MEDICAL MEN.

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expenditure. The more inert materials, such as those of bread, are consequently in request for the laying on of substance; the more energising, as those of meat, find proportionally less occupation. We are not vegetarians, and we think Mr. Morley is not strictly such; but we probably agree in this, that for some persons, and especially children, much can be done in feeding with little meat. It is to be noted, also, that a child's food must be abundant in order to fulfil its purpose. How much more easily he may have plenty to eat of vegetable than of mixed or meat diet in the poorer ranks of our countrymen is too obvious to need remark.

THE HEALTH OF OUR TROOPS IN THE SOUDAN.

So far as we have information on the subject, the health of the troops employed in the Soudan has been remarkably good, and the arrangements made by the medical staff for the prevention, so far as possible, of disease, for its treatment when it occurs, and for affording aid to the wounded, have been most successful; indeed, they are described by the special correspondents as "admirable." But we must not lose sight of the fact that a period is now coming on when the resources of the medical service will be very severely tested. The enforced inaction of the troops during the hot season must undoubtedly prove very injurious; and the effects of solar influence on the men who must necessarily be exposed to it cannot fail to tell on the sick-list. This is indeed already beginning to be manifest at Suakim, where during the late operations several cases of sunstroke occurred. We may look for a somewhat heavy list of such cases, and of heat-fever, dysentery, and possibly cholera. A number of cases of enteric fever are already stated to have been admitted to hospital, and there seems too good reason to believe that they will increase as the season advances. It is satisfactory to know that every provision has been made which foresight could dictate; that there is abundance of medical comforts at hand; that adequate arrangements have been made for the careful nursing of the sick; that an ample supply of ice is to be had as required, and that the means of transport in hospital ships fitted up with every appliance for the treatment of the patients and the efficiency of the medical service have been provided on a very liberal scale. We have not the least doubt that everything will be done by the heads of the medical service which practical experience and scientific knowledge can suggest, but we cannot help feeling anxious about the health of the troops during the coming hot season.

SALIVARY CALCULUS IN A MEDICAL MAN.

Dr. de Rato y Roces describes in the *Revista Asturiana de Ciencias Médicas* his own case of salivary calculus. When a child the sublingual glands were indurated and painful; afterwards that on the right side disappeared, but the left gland continued to cause trouble, the pain being felt in Wharton's duct, and there being increased secretion of viscid saliva. These symptoms, however, disappeared for a time. For several years, especially during the later months, pain and inflammation have returned, sometimes extending to the right side. After the acute symptoms have subsided a permanent induration has always remained. Last December Dr. de Rato suffered from a more severe attack of this kind than usual, accompanied by repeated rigors, followed by severe pain and febrile disturbance. Afterwards the inflammation extended, and glossitis and amygdalitis prevented speech and the ingestion of food; then came a copious secretion of viscid saliva. By the fifth day, when the inflammation had to some extent subsided, a probe passed into Wharton's duct detected a calculus, which was extracted by forceps the following day. It was of the shape of a date stone, weighed 540 milligrammes (8·37 gr.), and of the hardness of chalk. Externally it was of a dirty white colour with reddish spots, and internally it was white. Since the extraction of the calculus the induration remains, and Dr. de Rato believes there are also small calculi in the duct.

BIRMINGHAM MEDICAL INSTITUTE.

Dr. Thomas Underhill, J.P., presided at the annual meeting of the Birmingham Medical Institute on the 26th ult. The number of members is now 204, and during the past year no less than 597 books have been added to the library, which now consists of 9274 volumes. The annual income is not yet quite equal to the expenditure, but as the building and library are free from debt, the endowment unencumbered, and the number of members steadily on the increase, a growing feeling of confidence pervaded the meeting. Special votes of thanks were passed to the president, the honorary librarians and secretaries, and very important additions made to the committee by the election upon it of Mr. T. F. Chavasse, Mr. Jordan Lloyd, and Mr. Bennett May. One special feature of the Birmingham Medical Institute is that no ballot or other form of election is required to place a registered medical practitioner on the roll of members. The only requisite condition is that he undertake to observe the regulations, and be recommended by six members of the institute, of whom three shall be members of the managing committee. When this very open method was substituted for the ballot previously in force, it was feared by some that undesirable results might ensue; but in practice it has been found that the six signatures required to constitute membership afford all requisite guarantees. For the ensuing year, Mr. Sampson Gamgee was elected president of the institute, and Dr. Rickards and Mr. John Greene vice-presidents. The honorary librarians, Mr. Lloyd Owen and Dr. Saundby, and the honorary secretaries, Mr. W. G. Archer and Mr. Joseph Hunt, were re-elected.

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COCAINE FOR THE SOUDAN.

We are *glad to hear that the National Aid Society has arranged to send a supply of cocaine for the soldiers and sailors in Egypt and the Soudan. This is a thoughtful and commendable step, the costly nature of this drug rendering* it otherwise only too likely to be conspicuous by its absence. The Society, to the Princess of Wales's Branch of which the Queen has *forwarded a donation of £50* and *a case* of tobacco, is also sending out nurses, cooking sisters, and a variety of comforts and amusements for the troops.

From the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of February, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies exhibited, on the whole, a slight increase in the amount of organic matter, the proportion being greater in the water of the Southwark and Grand Junction, and least in that of the Lambeth and Chelsea Companies. The water supplied from the Lea by the New River and East London Companies contained slightly less organic matter than the previous month's samples, the New River Company's supply being in this respect far superior to any of the Thames waters, whilst the East London Company's supply ranked with the best of the Thames waters. All the samples were clear and bright.

From the reply of the Local Government Board to a memorial recently forwarded by the North-Western Association of Medical Officers of Health on the subject of revaccination, it appears that the Board are not prepared to propose for the sanction of Parliament an increase in the rate of payment for revaccination relatively to the rate *which boards of guardians may appoint for primary vaccination*; nor are they prepared to furnish to all medical practitioners lymph for the revaccination of the several *persons whom these practitioners may think proper to* vaccinate. With regard to this latter point, the Board are satisfied that such revaccinations as are performed in any *locality with lymph supplied at the public expense* ought to be done as part of the system of public vaccination appointed for the locality.

The Local Government Board have transmitted to the Isle of Thanet Sanitary Authority the report of Dr. Davies, their medical inspector, on the *sanitary condition* of that extensive district. It appears from this report that the water-supplies of the villages of Minster, Monkton, and Sarre are derived from shallow wells, many of which the inspector says are liable to pollution. The Local Government Board therefore urge upon the authority the necessity of providing a public water-supply for the villages mentioned under the powers of the Public Health Act.

Mr. Adam Sedgwick has in preparation a new book, to be entitled "The Elements of Animal Biology," which is intended to serve as an introduction to the study of Animal Morphology and Physiology. Messrs. Swan, Sonnenschein, and Co. are to be the publishers.

Surgeon-Major Oliver Codrington has been temporarily appointed Assistant Professor of Military Surgery at Netley, in the vacancy occasioned by the departure of Surgeon-Major Tobin for Suakim.

The *Przeglad* of Lemberg announces that cholera has broken out in the Crimea, and states that the Russian authorities are endeavouring to suppress all publication of details.

The Eastbourne Board of Guardians have resolved to adopt the suggestion which we mentioned some weeks ago as being advocated by Lady John Manners, and intend providing a mincing machine at the union, for the benefit of the inmates who are old and toothless.

The International Conference on the Prevention of Cholera in Europe has again been postponed. Signor Mancini has now telegraphed to the various European Governments requesting that the several delegates may be instructed to assemble at Rome on May 1st.

The American medical journals announce the death, on March 10th, of Dr. Ellerslie Wallace, Emeritus Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia—the chair previously occupied by Dr. C. D. Meigs.

PHOTOGRAPHY AND MEDICAL JURISPRUDENCE.

THE DETERMINATION OF PERSONAL IDENTITY.

BY WILLIAM MATTHEWS, BRISTOL.

In all books dealing methodically with the topic of medical jurisprudence, attention is directed to that division of the subject which treats of legal identification and its related particulars. The rules and usages by which the procedure is governed are primitive, but of long antiquity. Whether before the accredited officer of the Crown, the county coroner, or before the courts of criminal law, the corporal presence of the individual touching whom the inquiry is on foot is an indispensable preliminary. "If the body be not found, the coroner cannot sit," says Blackstone. "An inspection of the body is the essence of the inquiry," observes Dr. Taylor in the "Principles of Medical Jurisprudence." Upon occasion in the courts of civil procedure also the question of identity becomes the essential feature of the investigation. It is the real issue submitted to the adjudicators. "In such instances," says Dr. Beck, "the whole evidence turns on the question of identity." Stature, temperament, marks upon the person, colour of the hair, colour of the eyes, general resemblances, these have, heretofore, been the ordinary elements of the physiological sort upon which a conclusion has been based.

When and where photographic portraiture was first introduced to the notice of the courts does not clearly appear. Certainly, it has not been received with undeviating reliance; for the photographic presentment in many instances differs very materially to the eye from the personal reality. Witnesses, upon their oath, have sometimes been requested to pronounce upon resemblances from which, under ordinary conditions, they would have shrunk in bewildered uncertainty. Yet when considered from the stand-points (1) of their perfect accuracy of delineation, (2) of their minutely-true reproduction of the proportionate areas occupied by the several features, and (3) of the apparent permanence, in adult life, of those proportionate areas, there would certainly appear to be no inscrutable reason why photographs might not be subjected to tests of a severely scientific nature.

There are three or four indispensable conditions to be accepted by scientists, preliminary to such a consummation. 1. A due recognition of the permanence of the essential particulars of a given face. 2. Of the greater or less divergence of all other faces whatsoever from the permanent particulars of the face in question. 3. The requisite reliability of a unit of admeasurement that shall, similarly, be (*a*) permanent in a given face; (*b*) discrepant, more or less, in all other faces. 4. The accredited presence of a sufficiently undeviating horizontal plane, to afford an available zero or datum line.

Now, in order to sustain the proposition that a given adult face is permanent in its chief particulars, it needs be the obvious reflection—(1) that when a man stops growing the bones of his face stop growing at the same time, as all the rest; and (2) that when the bones of the face cease growing, the several features thenceforward retain in permanence their original *locus in quo*. It should go without saying that the requisite unit of the admeasurement must necessarily be sought in the face itself; for by this expedient the varying magnitudes of photographic portraits are effectually provided for. Hence the adaptability of the coloured circle of the eye for the desired purpose—(1) It is well-defined at its exterior circumference; (2) it is a permanent quantity in a given individual; and (3) its dimensions so materially differ in different persons, that of itself it is an important factor of diversity between photographs that are inherently discrepant. Granted, then, the requisite permanence of the facial perpendicular, and the requisite permanence of the unit of the admeasurement (the diameter of the iris at its exterior rim), it remains but to consider the limitless amplification of the facial diversity. It has been long an accepted hypothesis that the dimensions of an ideally perfect face should consist of certain duplicate and triplicate repetitions of its own elements; yet, nevertheless, that all actual faces are, to a greater or less extent, departures from the given ideal. In strict conformity with this hypothesis it may be pointed out that the endlessly numerous permutations which are everywhere consequent upon the presence of even a few factors of diversity is a matter quite amenable to arithmetic proof. This principle of permutation finds its always familiar illustrations in the "ringing of changes" upon an octave of bells, in the casting of dice, and in the myriads of differing verbal forms that a few vocal articulations have afforded to all the nations of the earth.

In conclusion, the general and special data which have been here set forth appeal in the first instance to the common apprehension of men of intelligence; and, secondarily, to the tests and investigations of experts. As the result of such tests and investigations, it is now confidently maintained that the data and conditions enumerated are trustworthy, and open to proof. The photographic portraits of various public personages, taken after intervals of twenty or more years, and suitably enlarged, have been found to correspond very minutely in admeasurement, whilst in the meanwhile great external change has been going forward in their countenance. On the other hand, a comparison of the portraits of any two distinct individuals, tested under the same rigid conditions, fully justifies the statement that, in such cases, varied and palpable discrepancies will inevitably become manifest.

The physiological facts having been accepted, the formularies of procedure may suitably engage attention. To those to whom the topic is new, an explicit statement of details might prove the more convenient; but summarily and technically, those particulars may be dealt with as follows:—1. Upon a photograph of enlarged magnitude let a right line be drawn from centre to centre of each pupil. 2. From the given centres describe arcs intersecting each other, above and below the right line, of a radius as the distance between the centres. 3. From the points where the arcs cut each other produce the perpendicular. This will, necessarily, be the true facial perpendicular, whatever may be the pose of the sitter. 4. Lay off a parallel on either side of the perpendicular at the distance of the given centres. 5. Lay off a series of parallels, above and below the line of the pupils, and let their measured distance apart be that of *precisely the diameter of the iris*. 6. Let each parallel extend over the right-hand margin of the portrait, and be numbered consecutively. The given line of the pupils being a naught or zero, let the other numbers proceed from it, upward and downward. 7. Reproduce these details upon the second portrait, and thereupon proceed to make the necessary comparison of particulars.

With the aid of the appliance known as the "identiscope," the required comparison can be effected under conditions the most favourable for careful inspection. Reproduced upon lantern-slides, conjoined by the agency of the zero-points, the compared portraits may be projected in combination, upon a scale of magnitude that would cause the most minute discrepancies to stand revealed, in any reputed instance of spurious or assumed identity.

UNIVERSITY OF ABERDEEN.—The Keith medal, instituted in commemoration of the late Dr. Keith, has been awarded to Mr. George Findlay. Clinical and general surgery form the subjects of examination.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

The Sanitary State of Alnwick, by Mr. JOHN SPEAR.[1]—The attention of the Local Government Board has for some years past been conspicuously directed to the sanitary condition of the Alnwick and Canongate urban district, both on account of its excessive mortality and by reason of reports of successive officers of health, who have resigned with exceptional frequency. And finally, the depositions taken at an inquest went to show that the conditions attaching to certain common lodging-houses indicated a state of grave sanitary neglect. The population was 6691 in 1881, and it consists to an unusually large extent of labourers, navvies, tramps, hawkers, and the like, who find accommodation in lodging-houses maintained largely by keepers of Irish nationality. Alnwick has a somewhat important sanitary history. It was inspected in 1849 on behalf of the General Board of Health, and was found to be marked for its wet surface, damp subsoil, and absence of artificial drainage, besides conditions as to arrangement of houses on areas which prevented even the most ordinary circulation of air about them. But in 1850 certain important improvements, including the sewerage of the town, were carried into effect. In 1866 Dr. Buchanan visited the town in connexion with the important report which he subsequently wrote on the relation of phthisis mortality to conditions of soil-wetness, and he found, in addition to the improvements already referred to, that others of importance, including the provision of a public water service, had been effected. But the actual results of these improvements were found to be in the main disappointing in so far as the mortality had been influenced. The general mortality rate had only fallen from 26·2 to 24·7 per 1000; there had been a reduction as to typhoid fever and diarrhœa from 1·35 to 0·87, and from 0·70 to 0·47 per 1000 respectively. But on the other hand, the rate from consumption had risen from 2·83 to 3·30, and that from other lung diseases from 2·80 to 4·05. Mr. Spear now tabulates the mortality returns from a number of specified diseases down to the end of 1883, and it is found that phthisis has made a still further increase in the magnitude of its rate, whereas the rate for other lung diseases remains practically where it was. The fact is, in the first instance, that the works of drainage effected in Alnwick did not, as elsewhere, succeed in reducing the level of the subsoil water beneath the town, and it has been just in proportion to such lowering that the reduction of the phthisis mortality has taken place elsewhere. But although Alnwick effected improvements some thirty years ago, the place has stood still since, if indeed it has not actually deteriorated as regards its sanitary state, and the lamentable account given by Mr. Spear of the crowded courts and alleys; of the absence of control exercised by the authority over the increasing amount of overcrowding; of the mingling together of houses, stables, middens, pigstyes, and the like; of dwellings built right into the damp earth; and of the disgraceful conditions existing in common and other lodging-houses, amply suffice to explain why a disease such as phthisis, which is so favoured by the conditions of crowding and want of fresh air referred to, has increased rather than diminished. The report embodies a long description of places such as have been referred to; and although it also contains an account of some excellent dwellings erected for the poor and of baths and washhouses, all provided by the Duke of Northumberland, yet such improvements are all but ineffectual in the face of the long-standing sanitary neglect in other matters. The secret of the neglect as regards house accommodation is, however, apparent from the report itself. Individual interests among members of the Town Council have paralysed the sanitary administration. This is why, according to Mr. Spear, so many dwellings entirely unfit for habitation are not dealt with; why building and rebuilding in crowded yards cannot be effectively stopped; why stables, middens, piggeries, and a hundred other nuisances remain undealt with. And even where nothing but a trivial alteration is needed the authority appears to stand idle. Thus, notwithstanding the immense danger now known to attach to a system by which there is a direct connexion between the interior of watercloset pans and the interior of the water mains, the sanitary authority have failed to take the necessary remedial action. And why? Because, says Mr. Spear, it would have required owners of property to provide so small a thing as the necessary flushing boxes for closets, and, "shrinking from this duty," they have "staked the health of the whole town on a mere chance." It is lamentable in these days, when so much importance is attached to the extension of the principle of local self-government, to read a report like this, in which, notwithstanding recurring elections to the Town Council, such a town as Alnwick can so long have had an authority tolerating such neglect as is now recorded, and all because those whose duty it is to act for the public benefit have "failed to hold the balance justly between individual interests and the interests of the town." In so far as the housing of the poor is concerned, it is to be hoped that Sir Charles Dilke has brought this report under the notice of his fellow-commissioners, and there are other respects in which the case merits the attention of the central government.

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[1] To be purchased of Knight and Co., 90, Fleet-street; Shaw and Sons, Fetter-lane; Haddon, Best, and Co., West Harding-street; and P. S. King and Son, King-street, S.W.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

King's Norton Rural District.—Exclusive of deaths of non-residents in public institutions, this district had in 1884 a death-rate of 14 per 1000, the zymotic rate being 0·8 per 1000. Although there was much small-pox in Birmingham during the year, no spread occurred in this rural district. Occasional importations were isolated in hospital, and, for the rest, the district has been protected, as the result of the efficient labours of the vaccination officer. Scarlet fever was also isolated in hospital, and, although twenty-four cases came under observation, no death occurred. The need for such construction of ashpit privies as will be free from nuisance is evidently very great, and Mr. Hollinshead is looking for the remedy in the new bye-laws which are under preparation. These will, of course, only affect new structures; but where sanitary authorities issue new diagrams and plans showing the form of closet permissible under bye-laws, it is astonishing to find how many of the older closets are in time altered according to the pattern indicated. It must, however, be remembered that a proper closet implies a small receptacle for filth, and the latter necessitates frequent removal of contents. Where an adequate system of scavenging is not in operation, people will never put a proper limit on the capacity of their privies, and before the new closets are constructed we advise the authority themselves to arrange a scheme which shall give every house at least a weekly visit, wherever the population is considerable.

Huddersfield Urban District.—During the fifty-three weeks included in the statistical year 1884, the death-rate for Huddersfield was 19·5 per 1000, and it is evident that on a long series of years there has been steady improvement in this respect. The rate from the seven principal zymotic diseases was 3·15 for the previous six years; in 1884 it was 2·38. The diarrhœa death-rate for the third quarter of the year, although not absolutely high, was nearly a tenth of the total mortality for that quarter, and it is to the high temperature and scanty rainfall that the result is in the main attributed by Dr. Cameron. But diarrhœa was more prevalent in 1882 than it was in 1884, and possibly this was due to the precautionary measures now adopted. Wherever a fatal case of diarrhœa was heard of, hose and pipes were at once sent to flush out the local drains, and all accumulations were at the same time removed. Thus, in an important sense the drawback attendant upon scanty rainfall was made good by the authority's officers. Enteric fever also became prevalent in the fourth quarter of the year; but the system of notification worked well and smoothly, and the great improvement effected in the hospital provision came in useful. Of 67 cases reported, no less than 47 were admitted into the Birkby Hospital, and following on this came a system of disinfection for the local drains. Under the compulsory Act, 234 cases were reported. Of these, 118 were cases of scarlet fever, and 91 of them were removed to hospital. The Act is again reported to have worked smoothly. The system of house-to-house inspection which has been in operation, and which is so deservedly regarded as one of the most important duties which sanitary officers can carry out, was temporarily suspended owing to changes in the staff. Much valuable work of a very similar sort was, however, effected as the result of the information acquired by the system of notification.

Brentford Urban District.—Sewers have now been laid throughout the district, and during the past year the work of making the house connexions has been in progress. At the same time sanitary defects which these works disclose are remedied, cesspools are filled in, and other sources of danger to health are abated. Some nuisance having been experienced from the sewer manholes, ventilating shafts have been erected, and during the warm weather hand flushing was resorted to. A first step has been taken to provide means of isolation by the erection of a Doecker hospital hut, but the present site is not regarded as permanently decided on. The annual death-rate was low—namely, 12·28 per 1000; that from the principal zymotic diseases was 1·2 per 1000. The estimated population is 12,307.

Holsworthy Rural District.—On a population of some 9000 the birth-rate for 1884 was 30·8, and the death-rate 16·5 per 1000. The only deaths coming within the group of the principal zymotic diseases were 4 from diarrhœa and 6 from whooping-cough. During the spring and early summer a smart epidemic of sore-throat, which Mr. Linnington Ash did not regard as diphtheritic, occurred in Holsworthy town. It was attributed to emanations from the sewers, the gully traps having become unsealed in the streets, owing to the combined effect of drought and strong north-east wind. In Ashwater much the same sort of disease occurred during the third quarter of the year. The affection was distinctly *infectious, but it was not regarded as either diphtheria or* scarlet fever. It caused no deaths. Improvements as to the water-supply of the district are steadily in progress, but much remains to be done in this respect, especially in Holsworthy town, which is dependent on surface wells liable to become dry during drought, and is also subject to the risk of pollution. This matter has been referred to before in the annual reports, and the time has come when the authority should take it in hand with a view of providing the inhabitants with a proper supply of one of the first necessaries of life.

Llanelly Rural District.—Dr. Raglan Thomas reports a diminution in the amount of epidemic prevalences, and in part he regards this as due to the system of paying a small fee to medical practitioners who have voluntarily reported fresh outbreaks. When such reports come in a searching inquiry is at once made, as is indeed indicated by a lengthened tabulated *résumé* of the conditions discovered. It would be still more interesting if, on future occasions, a column were to indicate the action which had been taken as the result of the discoveries made. Bye-laws now provide for the removal of all privy accumulations twice a week, but, as is often the case, people who are without sufficient garden ground are unable to comply with the regulation. Where this is the case the authority should regard it as its own duty *to effect the scavenging with the needed regularity and* frequency, instead of imposing the obligation on occupiers. A curious instance of water poisoning by zinc came under notice in connexion with the use of the Cwmfelin water. A very pure water had, by virtue of the dissolved oxygen and carbonic acid naturally present in it, taken up 6·4 grains of carbonate of zinc per gallon. This result, which is described by the analytical chemist as unique in his experience, was brought about by the use of so-called "galvanised" water pipes. Boiling causes precipitation of the zinc. Dr. Thomas still deplores the absence of an infectious hospital in his district. The death-rate for 1884 was 15·6 per 1000 living.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5872 births and 3967 deaths were registered during the week ending the 28th ult. The births exceeded by 58, and the deaths by 340, the average weekly numbers during 1884. The annual death-rate in these towns, which had been equal to 20·6, 22·1, and 23·5 per 1000 in the preceding three weeks, declined again last week to 23·2. During the first twelve weeks of this year the death-rate in these towns averaged 22·6 per 1000, against 24·6, the mean rate in the corresponding periods of the nine years 1876-84. The lowest death-rates in these towns last week were 17·8 in Portsmouth, 18·0 in Derby, 18·5 in Bradford, and 18·7 in Brighton. The rates in the other towns ranged upwards to 31·2 in Manchester, 31·7 in Newcastle-upon-Tyne, 33·9 in Oldham, 40·4 in Sunderland, and 41·9 in Cardiff. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had increased from 377 to 443 in the previous four weeks, further rose to 451 last week; they included 176 from measles, 124 from whooping-cough, 37 from "fever" (principally enteric), 37 from diarrhœa, 31 from scarlet fever, 25 from small-pox, and 21 from diphtheria. No death from any of these zymotic diseases was recorded last week in Brighton, whereas they caused the highest death-rates in Newcastle-upon-Tyne, Cardiff, and Sunderland. The highest death-rates from measles occurred in Huddersfield, Newcastle-upon-Tyne, Cardiff, and Sunderland; from whooping-cough in Preston, Cardiff, and Oldham; and from "fever" in Newcastle-upon-Tyne, Preston, and Norwich. The 21 deaths from diphtheria in the twenty-eight towns included 11 in London, 3 in Cardiff, and 2 in Portsmouth. Small-pox caused 47 deaths in London and its outer ring of suburban districts, 2 in Sunderland, 1 in Manchester, and 1 in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding five weeks from 1223 to 830, had increased again to 865 on Saturday last; and the admissions, which had been 94, 104, and 137 in the previous three weeks, further rose to 179 last week. The Highgate Small-pox Hospital contained 94 patients on Saturday last, the admissions in the week having been 31, a higher number than in any previous week of this year. The deaths referred to diseases of the respiratory organs in London, which had been 374, 455, and 487 in the preceding three weeks, declined again to 448 last week, and were 69 below the corrected weekly average. The causes of 121, or 3·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Norwich, and in three smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Preston, Hull, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 24·4 and 24·2 per 1000 in the preceding two weeks, further declined to 23·3 in the week ending the 28th ult., and was almost identical with the rate (23·2) during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 10·6 and 14·1 in Leith and Greenock, to 22·0 in Paisley and 29·9 in Glasgow. The 568 deaths in the eight towns included 32 which were referred to whooping-cough, 18 to measles, 12 to diarrhœa, 6 to "fever," 4 to scarlet fever, 1 to diphtheria, and not one to small-pox; in all, 73 deaths resulted from these principal zymotic diseases, against 88 and 85 in the preceding two weeks. These 73 deaths were equal to an annual rate of 3·0 per 1000, which was 0·4 above the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough, which had been 22 and 35 in the preceding two weeks, were 32 last week, and included 17 in Glasgow, 5 in Dundee, and 3 in Greenock. The 18 fatal cases of measles showed a decline of 10 from the number in the previous week; they all occurred in Glasgow. The 12 deaths attributed to diarrhœa showed an increase of 6 upon the number in the previous week, and exceeded by 3 the number in the corresponding week of last year. The 6 deaths referred to "fever" included 3 in Edinburgh and 2 in Glasgow; while all the 4 fatal cases of scarlet fever occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 122 and 124 in the previous two weeks, were 122 last week, and exceeded the number in the corresponding week of last year by 5. The causes of 71, or more than 12 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 32·7, 39·5, and 34·6 per 1000 in the preceding three weeks, further rose to 40·4 in the week ending the 28th ult. This is a higher rate than has prevailed in any previous week of this year. During the first twelve weeks of this year the death-rate in the city averaged no less than 34·1 per 1000; the mean rate during the same period did not exceed 21·6 in London and 20·3 in Edinburgh. The 273 deaths in Dublin last week showed an increase of 39 upon the number in the previous week, and included 32 which were referred to the principal zymotic diseases, against 30 in each of the preceding two weeks. Of these 32 deaths, 12 resulted from measles, 7 from scarlet fever, 6 from "fever" (typhus, enteric, or simple), 3 from diphtheria, 2 from whooping-cough, and 2 from diarrhœa. The annual death-rate from these principal zymotic diseases was equal to 4·7 per 1000; whereas the rate from these diseases last week did not exceed 2·5 in London and 1·7 in Edinburgh. The fatal cases of measles in Dublin, which had been 11 and 16 in the previous two weeks, declined again to 12 last week. The deaths from scarlet fever and diphtheria, on the other hand, exceeded those returned in any recent week. The 6 deaths from "fever" showed an increase of 3 upon the low number in the previous week. Seven inquest cases and 8 deaths from violence were registered within the city; and 85, or nearly a third, of the deaths were recorded in public institutions. The 51 deaths of infants exceeded the number in any previous week of this year, and those of elderly persons were also numerous. The causes of 38, or 14 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

We understand that in view of the necessity for an increase in the Army Medical Staff, the Secretary of State for War has decided to grant appointments to all the candidates who, at the late competitive examination, obtained the necessary qualifying marks, but were excluded in consequence of being beyond the number required to fill vacancies. This will provide an addition of about thirty-eight officers to the Department.

We note that a telegram having been received recently by Her Majesty's Secretary of State for India from the Government of India, requesting that all officers in military employ on furlough may be directed to rejoin their regiments or appointments, instructions to this effect were issued on the 25th ult. to all medical officers, as also to combatant officers, of the Indian army to proceed to Brindisi in time to join the Peninsular and Oriental Company's mail steamer there on the 6th inst.

INDIA OFFICE.—The Queen has approved of the following admissions to her Majesty's Indian Medical Service:—John Tasman Waddell Leslie, David Prain, Arthur Thomas Bown, Upendra Nath Mukerji, and William Locking Price, to be Surgeons in the Bengal Army.

ADMIRALTY. — The following appointments have been made: Staff-Surgeon James Dunlop, M.D., to the *Ruby;* Surgeon Herbert Canton, to the *Ruby;* Staff-Surgeon Albert C. Traceby, to the *Mercury;* Surgeon Edward R. T. Fasker, to the *Shannon*, additional; Surgeon Edward H. Williams, to the *Cockatrice;* Surgeon Penrose J. Barcroft, to the *Imogene;* Herbert M. Sweetman to be Surgeon and Agent at Schull; and Francis Rennie, M.B., to be Surgeon and Agent at North Shields; Staff-Surgeon Albert C. Queely, to the *Mercury;* Thomas W. Fryer to be Surgeon and Agent at Gerran's Bay; George W. Hill to be Surgeon and Agent at St. Mawes and St. Anthony.

ARTILLERY VOLUNTEERS.—1st Lancashire: Thomas Moore Dawson, Gent., to be Acting Surgeon.

ENGINEER VOLUNTEERS.—1st Newcastle-on-Tyne and Durham: Surgeon John Wilson resigns his commission.

RIFLE VOLUNTEERS.—1st Clackmannan and Kinross: Peter Rough, Gent., M.A., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the Lincolnshire Regiment: Surgeon and Honorary Surgeon-Major Edwin Morris, M.D., resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the battalion on his retirement.

THE LATE GENERAL GORDON.—We understand that the *Boy's Own Paper*, of the Religious Tract Society, whose readers have already subscribed over £1200 for two lifeboats, besides £400 for a hospital cot, is promoting a Boys' Gordon Memorial on the lines known to be dear to Gordon himself—viz., to help the poorer working and suffering lads.

Correspondence.

"Audi alteram partem."

THE NEW EDITION OF THE NOMENCLATURE OF DISEASES.

To the Editor of The Lancet.

Sir,—The second edition, being the first revision of "The Nomenclature of Diseases," is now in the hands of the profession. A memorandum of the Subcommittee on Classification inserted therein quotes the first line of the preface of the first edition, which declares "the perfecting the statistical registration of diseases" to be the object of the undertaking, and then significantly adds, "this object has certainly not been as yet attained." I think the bulk of the profession will so far agree with the subcommittee in this expression of opinion, for it will doubtless assume that the prefatorial memorandum was written, as is customary, after the rest of the work was in type.

"To-morrow the critics will commence—men who have failed in literature and art," some members of the subcommittee may possibly say, quoting Lord Beaconsfield. To them the painstaking registrar will reply, in the words of a still greater authority, "I am nothing, if not critical."

May it not be possible, for instance, for cases of "frostbite" to occur in this variable climate of ours? One such accident comes under the notice of our conscientious statistician, who wishes to notify the same in an orderly manner. He turns to his copy of "The Nomenclature," which a parental Government has just forwarded him, and looks out "frost-bite" in the index. He is referred to pp. 193, 215, 217, 223. He opens the volume at p. 193, and finds the ailment in question placed under diseases of the skin. He turns to page 215, and perceives it inserted under general injuries with a note as to its limitations. At page 217 it is placed amongst the local injuries, and at page 223 along with injuries to the skin. If this arrangement (?) is insufficient to produce the bewilderment necessary for statistical purposes in the brain of our conscientious statistician, I may yet add a further section, wherein "frostbite" can have a place, and that will be found at page 12—"Effects of cold." Somewhat similar results would be the outcome of attempts to classify the other "effects of climate, &c." recorded in the nomenclature. I shall not, however, encroach on your valuable space by recapitulating them.

A casual perusal of the volume in question has, however, brought to light the following further peculiarities—e.g.: Alcoholism (p. 12) is a disease of diet; alcohol (chronic poisoning by) (p. 203) is included among the poisons; mercurial tremor may be either a disease of the nervous system (p. 27), or the result of a poison (p. 199); syncope is both a disease of the nervous system (p. 29) and one of the circulatory system (p. 71); ranula occurs twice (pp. 89—99); chromium is the only metal whose salts are given in the section (p. 199); phosphorous acid is a poison; nitrous and sulphurous acids are not given (p. 201); sulphate of indigo is named (to use a parliamentary expression) in the short list of poisonous acid salts (p. 201); picric acid is called by the discarded name carbazotic acid (p. 203); elephantiasis (p. 123) is classified as a proliferation tumour, whether it is evidently caused by the presence of the parasite filaria sanguinis or not; we also learn that this disease is a variety of "diffuse fibroma" (p. 309); tubercle is a variety of granulation tumour (p. 313); gonorrhœa is a disease of the whole body (p. 11); gleet (gonorrhœa mucosa) is a disease of the male organs of generation, unless it is caused by gonorrhœa (p. 135). In the first edition, gonorrhœa was placed amongst diseases of the urinary system. "Amyloid," the synonym of the rarely-used term "lardaceous," is frequently omitted—e.g., pp. 3, 105. The following diseases and synonyms are omitted: Comedones, area Celsi, Duchenne's paralysis, Jacksonian epilepsy, amyotrophic lateral sclerosis, and many other well-known nervous diseases. Fetid bronchitis, malignant endocarditis, peritonitis due to gonorrhœa, perimetritis and parametritis are not inserted in the index, although they occur on page 147.

Many fairly common poisons are also omitted—e.g., croton chloral hydrate, paraldehyde, &c. Finally, "morula" (O tempora! O morula!) is the Latin equivalent for "yaws." One would almost imagine that our classic must have been pleading with the printer's devil for a "brief respite" from the latter's too persistent visits for "copy" when he substituted "morula" for the time-honoured "frambœsia," although the latter's derivation from the French (alluded to by Bateman) is scarcely classical.

I am, Sir, yours obediently,

Brighton, March 30th, 1885. W. Ainslie Hollis.

FORENSIC MEDICINE.

To the Editor of The Lancet.

Sir,—I have waited in the hope of seeing letters from more experienced writers and abler pens than mine confirming the remarks of your able leader of March 7th. There are, according to the Medical Directory, fifty-one medical coroners in England and Wales out of a total of 281. The subjects of forensic medicine and coroners' inquests penetrate every nook and cranny of medical practice in England, Wales, and Ireland; and, though there is no coroner's inquest in Scotland, the subject of forensic medicine has received more practical attention there than in any other part of the United Kingdom. I am surprised, therefore, that no notice has as yet been taken of your leading article by some of the many who are so capable of dealing with it. Having in the course of the last twenty years made many post-mortem examinations for different coroners, and taking great interest in all medico-legal cases, I am in a position to confirm the remarks in the second part of your article.

There is a very forcible reason why two examiners should always be employed in cases involving a criminal charge, which you have omitted to notice. One may be ill or even dead when the trial comes on, and if he has been unassisted there is no one to give evidence or to be cross-examined. It is true that the depositions before the coroner and magistrate are in court and can be read, but anyone who has attended trials must know what a very unsatisfactory substitute for a witness are his depositions.

Another point which can hardly be ignored is the importance of a division of time and labour. I know nothing more fatiguing than making a post-mortem examination of an adult corpse, completely and satisfactorily, by oneself. Even in a hospital dead-house, with every convenience, it means time and work; but in the dwellings of the poor, without any convenience whatever, and with the body lying on the floor, it becomes as hard a task as can well be undertaken.

The importance of expert evidence in criminal cases will be seen by a reference to recent trials. In the Penge case the question was simply, Did the deceased die from starvation or natural causes? and had there been present at the autopsy one of the many experienced pathologists attached to the metropolitan medical schools, most of the difficulties of the case would have vanished. In two cases which occurred recently in Manchester, the evidence of Dr. Cullingworth, the lecturer on Forensic Medicine at Owens College, was most important; strengthening the case for the prosecution in one and disproving a groundless charge in the other. And in all cases which are likely to proceed to a higher court it is obviously desirable that the coroner and medical witness should have the benefit of a second opinion—i.e., of an expert, well experienced in post-mortem examinations, and with a competent knowledge of forensic medicine.

Another matter which you have not noticed is that the coroner in a certain proportion of the cases which come before him has absolute discretionary power in the selection of a medical witness, none having been called in either before or after death. Hence, in all these, he is at liberty to employ an expert without any encroachment upon the rights of general practitioners. And it is these unappropriated cases, as they may be called, which might be utilised for the study and practice of forensic medicine. In 1861 the chair being then vacant, the late Dr. Ayrton, who was generally chosen by the coroner at that time to make all post-mortem examinations for him, was appointed the lecturer on medical jurisprudence at our local medical school, and it was hoped that the appointment would enhance the interest of the lectures. Dr. Ayrton only lectured, however, for one session, and the experiment was abortive. In a paper read before our medical institution in 1876 on the "Coroner's Court," I attempted to show how it might be rendered more effectual in providing "the more efficient performance of all medico-legal autopsies and a field for the practical study of forensic medicine in our medical schools." Referring to the latter, I observed, "In a word, every department of medicine should be taught and learned 'practically.' Why should forensic medicine be any exception to the rule? Within a distance of very little over a mile from the Royal Infirmary is a place which affords a field for the practical study of forensic medicine little inferior to the Morgue of Paris, where world-renowned medical jurists, Orfila, Devergie, and others, acquire their reputation. I refer to the dead-house, Prince's Dock, where cases of death from drowning, burning, suffocation, exposure to cold, and infanticide, may be seen in almost every variety. ...... Now, without encroaching upon other gentlemen's province, the students of the Royal Infirmary School of Medicine (now the Medical Faculty, Liverpool University College) might have many opportunities afforded which they do not now possess. During the summer session the lecturer on forensic medicine might, I am sure, easily obtain permission of the authorities to visit this place and show the external appearances of death from the various causes I have indicated as to be met with there." The suggestion was favourably received by those present at the meeting, which included Dr. Ewing Whittle, then, and until very recently, lecturer on medical jurisprudence. But changes are not easily made, and so far nothing has been done. Mr. F. T. Paul, a most experienced pathologist, has just been elected to the vacancy, and I trust that he will be afforded every reasonable opportunity of both practising and teaching forensic medicine.

With regard to toxicology, it seems to me to be very important that students should be taught the detection of poisons in urine, vomited matters, &c., although the more elaborate examination of these, as of viscera, must be left to the analytical chemist. But the medical practitioner is the first on the spot, and it is his accurate observation of facts and symptoms which leads to detection. In the Edinburgh opium poisoning case, which occurred some years ago, it was reported that some spots on the nightdress of the deceased were detected by the chief medical witness as caused by laudanum having been spilled. This single fact proved a most important piece of evidence, as the case presented all the usual difficulties of opium poisoning. In the Lamson case the careful preservation and analysis of the matters first vomited were the most important links in the chain of evidence against the prisoner. Much, if not all, the mystery of the Bravo case would have been dispelled by a careful analysis of the urine, fæces, and vomited matters while the unfortunate deceased was still living. More important than analysis is the careful observation of symptoms, and comparing them with those of poisoning. In the recent cases of murder by arsenic in this city it was shown by the confession of one of the prisoners that eleven deaths were due to arsenic administered by one or both of the accused persons. All these persons had been attended by medical practitioners, and the deaths had been duly certified. How many more victims might have fallen had not the death of Thomas Higgins excited Dr. Whitford's suspicion, it would be hazardous to guess; but the case shows the importance of careful observation. It was the sudden nature of the death which excited Dr. Whitford's suspicion, though in the miserable surroundings of the case he failed to see any motive for foul play until he heard that the life of the deceased, a poor bricklayer's labourer, was insured to the extent of £100.

I could have added more were this letter not already too long. I conclude with the hope that the defects you have indicated will be remedied, and that forensic medicine will become, as so interesting a subject deserves to, a thoroughly practical and attractive branch of medical study.

I am, Sir, yours faithfully,

Liverpool, March 25th, 1885. FRED. W. LOWNDES.

PHYSIOLOGY IN OXFORD.

To the Editor of THE LANCET.

SIR,—You have thought fit to accuse those who recently opposed the grant to the Physiological Laboratory at Oxford of misrepresentation, recklessness, injustice, and an unwarrantable use of personal allusion. As all the circulars and notices issued by the opponents of the grant passed through my hands, I ask you to allow me to repudiate your accusation as emphatically as possible, and in enclosing you the documents in question I challenge you to point out one single sentence containing a misrepresentation, a reckless or unjust statement, or any personal allusion which an official position does not warrant. Two concessions only were asked of Professor Sanderson—viz., that he would not hold a certificate to dispense with anæsthetics, nor one to free him from the necessity of killing the animal.

Now, if the promoters of the grant had said openly, "Away with such restrictions and concessions; they are an insult!" the opponents of the grant, however much they might have regretted such a declaration, would have respected it as the bold challenge of a candid antagonist. But in the circular issued in advocacy of the grant, and in the debate in Convocation, the arguments used were, "There are to be no painful experiments on living animals, either with or without anæsthetics. The grant is only for coal, gas, and water." You, Sir, know well that there may and will be painful experiments on living animals without anæsthetics within that laboratory *for purposes of research*, and to say, as was said, "There will be none for purposes of demonstration and instruction," and at the same time to suppress all allusion to experiments for research, is an act of "aggressive concealment" unworthy of those who believe they have a good case.

I am, Sir, your obedient servant,

FREDERIC E. WEATHERLY, M.A.

Brasenose College, March 28th, 1885.

⁂ Mr. Weatherly cannot be ignorant of the fact that the cause he advocated received some of its most powerful support from others than those immediately concerned in the voting at Oxford. Our remarks did not apply to the phraseology of the circulars with which he has favoured us.—ED. L.

INSANITY AFTER OVARIOTOMY.

To the Editor of THE LANCET.

SIR,—It would seem desirable that every case in which ovariotomy has been followed by insanity should be recorded.

Some years ago, in Sydney, I removed a large ovarian cystoma from a widow aged about forty. I have not brought the notes of the case with me, and cannot therefore give her exact age. Three days after the operation she became insane, and, unlike most of the cases related by the speakers upon this subject at the last meeting of the Clinical Society, the disease became chronic, and it was found necessary to confine the patient in the asylum at Gladesville. The disturbance of the mental balance in this case, I thought, was due to the sudden and violent change from extreme mental depression to excessive joy. The patient had quite made up her mind that she should die under the operation, and had given directions as to the conduct of her funeral. Her extreme astonishment when she recovered from the effects of the anæsthetic at finding that she was not only living, but rid of her burden, I shall not soon forget. I should state that there was no family history of insanity.

I am, Sir, yours obediently,

Sydenham-hill, March 30th, 1885. P. SYDNEY JONES.

HICKS *v.* BEDFORD AND OTHERS.

To the Editor of THE LANCET.

SIR,—Dr. Rogers, in his interesting letter published by you on March 21st relating to this case, draws attention to a very important passage in Mr. Justice Wills' charge to the jury. The quotation given is that "there is no statutory power whereby anyone, lunatic or otherwise, can be detained in a workhouse against his will." As Dr. Rogers points out, this ruling must cause a very great surprise to those concerned in workhouse administration, as it declares illegal a practice which has gone unchallenged for upwards of forty years at least. But this particular paragraph, at any rate, is not in accordance with the Poor-law Amendment Act of 1867, 30 & 31 Vict., sec. 22 of which states: "When there shall be in any workhouse a poor person suffering from mental disease, or from bodily diseases of an infectious or contagious character, and the medical officer of such workhouse shall, upon examination, report in writing that such person is not in a proper state to leave the workhouse without danger to himself or others, the guardians may direct the master to detain such person therein, or, if the guardians be not sitting, the master of the workhouse may, until the next meeting of the guardians, detain him therein, and *such person shall not be discharged from such workhouse until the medical officer shall in writing certify that such discharge may take place;* provided, however, that this enactment shall not prevent the removal of a lunatic to a lunatic asylum when such removal is otherwise required by law, nor the removal of any poor person after the parent or next of kin of such person shall have given to the guardians such an undertaking as they shall deem satisfactory to provide for the removal, charge, and maintenance of such person with due care and attention while the malady continues."

It is the practice at the Stoke-on-Trent Union Workhouse, where I am medical officer, for certificates to be signed by myself, the master, and the clerk to the guardians, when it is thought necessary to detain any person suffering from mental or infectious disease, and I have on more than one occasion thus detained patients convalescing from scarlet fever and cases of delirium tremens. I enclose our form of certificate, which is drawn up in strict accordance with the Act of Parliament.

I am, Sir, yours obediently,

Stoke-on-Trent, March 30th, 1885. J. G. UVEDALE WEST.

THE HISTORY OF THE USE OF IPECACUANHA IN DYSENTERY.

To the Editor of THE LANCET.

SIR,—Dr. Macpherson's paper on the above subject, read at the meeting of the Medical Society on March 9th, was one of great interest. It would appear, however, that it was left to Sir Joseph Fayrer to recall the fact that it was to Mr. Docker we owed the introduction of the remedy into the practice of the British army and the reduction of its employment to a system. Sir Joseph Fayrer was right in thus giving honour to whom honour is due; for, although something may be credited to improved sanitation, &c., there is no doubt that the great decrease in the mortality from dysentery in India in late years is due to the employment of the system of treatment introduced by Surgeon-Major Docker.

Having treated a large number of cases of dysentery with ipecacuanha, *in large doses, during my service in Ceylon,* India, and British Burmah, I can bear testimony to its great efficacy in acute cases, a few twenty-grain doses bringing the disease promptly to a termination, when treated at an early period, as stated by Sir Joseph Fayrer. I can also bear out Dr. Cullimore's belief that "in dysentery associated with hepatic disease ipecacuanha, in large doses, is not well borne." Dysentery is frequently found associated with, or dependent on, hepatic congestion. My latest experience of the treatment of such cases was given in a paper in the *Indian Medical Gazette* of July 1st, 1881; and as the passage bearing on the treatment of this complication is short, and the subject one of much interest, I beg leave to quote it:—"When dysentery is present, complicating the hepatic congestion, I have found the treatment suggested at page 52 of my book successful—viz., a mixed treatment of alternately giving ipecacuanha (twenty to thirty grains) and chloride of ammonium until the relief of the dysentery, or a full midday dose of ipecacuanha, or the latter in enemata should there be fear of vomiting, with morning and evening doses of the chloride, or in some cases a midday dose of the chloride may be preferable, and morning and evening doses of the ipecacuanha, until the dysentery is checked. In such cases the patient, if asked, will express himself as receiving great relief from pain by the exhibition of the chloride; and, if so, it may be well to give it more frequently than here recommended." I am, Sir, yours, &c.,

WM. STEWART, M.D.,
Surgeon-General, A.M.D. (retired).

Mount Pleasant, Lymington, March 23rd, 1885.

AN anonymous donor has intimated to the Committee of the Sheffield Hospital and Dispensary his desire to endow a bed in the institution, in memory of the late General Gordon, on condition that it shall be known for ever as the "Gordon Bed." The endowment is thirty guineas a year, which the donor will pay for some time, and then invest capital with trustees sufficient to raise the amount annually required in perpetuity.

THE GORDON MEMORIAL HOSPITAL.

(*From a Correspondent.*)

THE choice of Port Said for the proposed establishment of a Gordon Memorial Hospital appears to be adversely commented on by professional and public opinion in Egypt. It is strongly urged that by far the most suitable place is Alexandria. It is the seaport of Egypt, the centre of commerce, and has a population of nearly 200,000.

Port Said is an outlandish insanitary little town, with only 12,000 people, of whom about six families are English. There is no highway to it from any part of Egypt except from Suez by the Canal, and ships passing through the Canal do not stop at Port Said. Nor is there any railway communication with it, so that a hospital there could benefit only an odd seaman landed from a passing vessel, or, perchance, a stray traveller.

In Alexandria, on the other hand, with its extensive shipping, as the import and the export city of Egypt, a large number of British seamen every year are landed for resident treatment in a hospital. For this they have to depend on foreign institutions, and are attended by nurses that do not always speak their language. English residents, also, in the towns and villages of Egypt, that have no real home where they can be attended to during sickness, go to hospital in Alexandria as the commercial centre, and could not go to Port Said for want of railway communication.

In Alexandria the English residents contribute most liberally to a foreign hospital. In it hundreds of merchant seamen, many officers and men of the British Army and Navy, and Englishmen without home comforts, are treated by the English doctor, who is one of the visiting surgeons. In the same hospital, and by the same doctor, 200 or 300 Egyptians are treated annually as in-patients, besides some 20,000 out-patients. This success is almost entirely due to the ability and energy of the English doctor. Natives (Egyptians, Bedouins, and Soudanese) flock from far and near, attracted by the reputation that English surgery has won in his hands; and while they gravitate to a centre like Alexandria, with a surgical fame already declared, they never would go to Port Said, where the essentials of success do not exist, and where a fine institution, after an ineffectual flicker, would soon dwindle down into a fourth- or fifth-rate cottage hospital.

The success in attracting natives is a most important point, for it must be remembered that Gordon, to whose beloved and honoured memory a hospital is to be erected in Egypt, was, above all things, catholic, and gave his life for Mussulmans.

It is to be hoped that this matter will receive the anxious consideration of the Memorial Committee, if they desire an institution that will really honour the blameless and heroic life of General Gordon, and that will be a credit to its founders.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

DR. DALLINGER IN NEWCASTLE.

DR. DALLINGER delivered a lecture last week in our Literary Philosophical Institute which will not be soon forgotten. The subject, I need scarcely say, was treated in a most masterly and advanced manner by the reverend lecturer. The title of his subject was "On a New Putrefactive Organism, with some Deductions concerning the Group," but the mere title gives but a faint idea of the extent of ground covered by the reverend and learned lecturer's discourse, which was of a deeply interesting character, and well illustrated by the oxyhydrogen lantern. He showed certain nomads that he had discovered by a powerful microscopic lens, rectified by the modern employment of various essential oils as corrective media of refractive errors. He dwelt principally on septic organisms, and went fully into the source and life of these nomads, how they were produced in water where animal matter was decomposed, and by such decomposed animal matter became reproduced into a new form of life. He urged upon biologists of the district the study of the bacteria, so that the various forms might be followed out, and the fullest information on the subject obtained, which, he said, was of the greatest importance to the human race.

THE FLEUSS APPARATUS.

The local papers are much taken up with letters and inquiries about the Fleuss apparatus. It is felt that if such had been in readiness after the explosion at Usworth the lamentable loss of life by the intrepid explorers might have been avoided, and possibly lives in the future rescued by its adoption. It has been sufficiently shown that the Fleuss apparatus enables its wearer to remain under water or in an unrespirable atmosphere for as long as an hour and twenty minutes. The Fleuss apparatus may be in its essentials thus described. It consists of a mask or mouth-piece, a knapsack, and an elastic bag or air reservoir. The mask fits tightly over the eyes, mouth, and nose, and is held in position by means of straps fastened at the back of the head. The knapsack comprises the gas chamber and the alkali chamber. The gas chamber is a strong cylinder made of sheet copper, 12 in. long and 8 in. diameter, and will contain four cubic feet of oxygen gas at a pressure of 58 lb. per square inch. The alkali chamber is contained in a tin plate case, and is made of vulcanite 12 in. high, 12 in. wide, and 6 in. deep, divided vertically by diaphrams so disposed as to cause the exhaled air to pass through the caustic alkali twice before it is delivered into the fresh air reservoir deprived of all the carbonic acid gas, and the greater part of the moisture or aqueous vapour of the breath. The fresh air reservoir is made of vulcanised indiarubber, which admits of a pulsating movement corresponding to the breathing of the wearer. It is worn on the front of the body extending over the chest and stomach. A flexible inhaling tube is carried over one shoulder and connected to the air reservoir, and the flexible exhaling tube is carried over the other shoulder, and connected to the decarbonating or alkali chamber. The exhaled air, after passing through the alkali chamber, flows into the air reservoir, on the point of entering which it receives the required supply of oxygen, which is regulated by a small valve under the control of the wearer. The apparatus is easily carried, and has the great advantage, besides its efficiency, of leaving the limbs of the wearer free. In an able article in the *Newcastle Daily Chronicle* the moral effect of having the apparatus in readiness is pointed out, and it is believed "that a couple of the apparatus would be of more value than a score of willing explorers—in the event of a colliery explosion—with the courage, but without the means, to successfully combat the insidious effect of the after-damp."

Dr. O'Hanlon, the medical officer of the Spennymoor Local Board District, in his report, points out with regret that the use of opium is increasing in the district, and especially amongst the female population. This is much to be regretted, as the habit could not—up to late years at all events—be considered as established among our northern mining population.

Newcastle-upon-Tyne, March 24th.

EDINBURGH.

(*From our own Correspondent.*)

CLOSE OF THE WINTER SESSION.

THE winter session of the Edinburgh Medical School came to a close on Friday, the 27th ult. There was the usual interest displayed in the summing up of the work of the session by the various lecturers, and the distribution of medals and prizes to successful competitors; although, judging by the small attendance at one or two of the classes, it appeared that many students had already made their escape from college trammels to the enjoyment of a well-earned holiday. This did not interfere, however, with the lively interest displayed in the closing lecture of the class of Clinical Medicine, delivered by Professor Maclagan; for it was widely known that this was to be a valedictory address on his retirement from the chair. Long before the appointed hour the lecture theatre was crowded with students; there was also a large representation of the teachers in the Edinburgh Medical School, many of whom, now occupying important posts of responsibility, had studied under the veteran and genial professor, whom they were now assembled to honour. Professor Maclagan's entrance, supported by his colleagues of the clinical chair, was greeted with a most enthusiastic demonstration of esteem, which was warmly reiterated from time to time as some telling point, some apt illustration or classical quotation, marked the phases of his most interesting address. In a few comprehensive sentences Professor Maclagan reviewed the work done during the session, so far at least as the lectures were concerned, dealing shortly with each system of the bodily mechanism and its disorders, and pointing out the significance of each in the economy of general medicine. In the branch to which he had drawn attention specially—that of diseases of the skin—there had been no lack of interesting cases, and he congratulated the students upon the opportunity which had been afforded them of studying some of the rarer forms—as, for instance, true leprosy. Passing then to the subject of his retirement, Professor Maclagan explained that it had been for some time in contemplation, owing to the completion of the new Public Health Laboratories, to the development of which he was anxious to devote his time and energies, but that at the request of his colleagues it had been postponed until the present time. Speaking of the charm of hospital work both to the scientific physician and to the well-wisher of his fellows, he alluded feelingly to the regret which he experienced in parting from surroundings that had afforded him so many opportunities of pleasurable interest and of usefulness to others, and testified to the warm feeling of personal gratification with which he looked back upon the cordial relations which had always existed between himself and his fellow-workers, be they teachers or students. In dealing with the many phases of hospital work, he drew attention specially to the importance of children's diseases, and of the fevers, for the study of both of which increased facilities are to be provided; and, in meeting the objections which have been urged against the study of the latter, he held strongly that those whose natural bent had led them to encounter the dangers of a medical career should not flinch before an additional risk, by avoiding which they could not enter fully equipped upon the practice of their profession, and that, even here, that Providence under whose care they had prospered so far would still be their protection. Professor Maclagan then took leave of the class over which he has presided so long, his adieux receiving the most enthusiastic response from the students; and there was not one amongst them, as they rose *en masse* and waved a last farewell, but would carry away with him a kindly feeling towards the "old man eloquent," whose well-weighed words had taught him many a useful lesson, and whose gentleness and courtesy had inspired him with feelings of the deepest respect.

A WISE SCHOOL BOARD ELECTION.

The city of Edinburgh is to be congratulated upon the return of an able representative of the medical profession as a member of its newly-elected School Board. The subject of Over-pressure in Board Schools is such a burning question at the present juncture that a School Board which counts a medical man upon its roll will be viewed with much less suspicion by the parents of the oppressed infants than where this is not the case. Although returned as a "ratepayer's candidate," Dr. Russell will doubtless not feel bound to advocate that most fertile source of over-pressure, a minimising of the teachers' emoluments, that makes the straining after large grants essential to their bare existence.

DINNER TO DR. ARTHUR THOMSON.

Dr. Arthur Thomson, the newly chosen lecturer on Human Anatomy in the University of Oxford, was entertained at a congratulatory dinner by the University Assistants' Club, at the Waterloo Hotel on March 27th. Dr. Murdoch Brown occupied the chair, and amongst the guests present were Dr. Thomson, senior, Professor Turner, and Professor T. R. Fraser, Dean of the Faculty of Medicine. After the loyal and patriotic toasts had been given, the chairman proposed "The Health and Prosperity of Dr. Thomson," and paid a warm tribute to the talents as well as to the *bonhomie* which had placed him so high in the esteem of his colleagues. Dr. Thomson responded in an amusing speech. In proposing "The Assistants' Club," Professor Fraser alluded to the importance of a University being distinguished by achievements which extend the area of science as well as by the completeness of its didactic functions, and whilst deprecating the employment of large sums for the endowment of bursaries, which reward their holders for merely doing their duty, he strongly urged that such sums should rather be devoted to defraying the expenses of scientific research, which has been largely crippled through lack of funds amongst those who might otherwise have undertaken such work with the very best results.

Dr. Arthur Thomson is succeeded in his post of Senior Demonstrator of Anatomy by Mr. David Hepburn, M.B., C.M., who has been for three years upon the staff of demonstrators.

PARIS.

(*From our Paris Correspondent.*)

THE DIVULGENCE OF PROFESSIONAL SECRETS.

Dr. **Watelet**, who was fined 100 francs for having divulged a "professional secret" under circumstances referred to in my letter of March 21st, has protested by a letter in a morning paper against the judgment of the Court by refusing to sign a bulletin, a printed form which every medical man receives from the Prefecture of the Seine, and which he is required to fill up on the death of a patient. The bulletin contains as headings: name of the principal disease, final accidents, cause of death, duration of the malady, &c. Dr. Watelet appears to find this demand inconsistent with the charge brought against him, and consequently returned the bulletin unfilled to the Prefect. I am afraid, however, that he will again render himself amenable, as the name and address of the patient are written on a slip of paper which is detached from the body of the bulletin before the latter is sent back to the office of the Prefecture. As I have already observed, the position of a medical man in his relations to society is peculiarly difficult and delicate, for the construction that may be put on the article in question (378 of the French Penal Code) is so elastic that a medical man is never safe, as he may at any moment unwittingly commit himself, as in the case of Dr. Watelet. A striking example of this has just happened to another medical man in Paris. A physician, who was also a pharmacien, but who practised only in the latter capacity, lately died. Dr. Constantin Paul, in announcing the event at a meeting of the Société de Thérapeutique, of which the deceased gentleman was a member, stated that death was caused by tubercular meningitis, of which he had an attack ten years previously. The Insurance Company in which the deceased had insured his life for 200,000 francs, or £8000, having taken note of this circumstance, has refused to pay the widow, on the grounds that her husband's life was insured subsequent to the attack he had ten years before, he being at the time the subject of a fatal malady which eventually carried him off. The case, which is interesting from more than one point of view, is pending, and it is said that if the Insurance Company should persist in their refusal, Dr. Constantin Paul will be prosecuted for divulging a professional secret. Examples of this kind are daily to be met with, for we see in the medical and lay papers full descriptions of maladies of persons of note ante mortem and post mortem. At this very moment the nature of the malady from which General Grant is suffering is being publicly discussed on both sides of the Atlantic, and so was that of General Garfield and M. Gambetta, and yet no one ever dreamt of prosecuting the authors of the published articles.

THE GODARD PRIZE.

The Société de Biologie of Paris has awarded the Prix Godard (1884) to Dr. E. Leblond, for his work on the physiological and therapeutic action of caffeine.

Another election of a corresponding member of the section for Medicine and Surgery of the Paris Academy of Science, took place last week. Sir James Paget, who was elected, received thirty-eight votes, against two for Sir Joseph Lister, and one for Dr. Leudet, of Rouen. Dr. Panum, of Copenhagen, was also a candidate.

Paris, March 31st.

The Association of Public Sanitary Inspectors.—At the next monthly meeting of this Association, to be held April 4th (this day), at 1, Adam-street, Adelphi, at 6 p.m., an address on "Sanitation" will be delivered by Dr. B. W Richardson.

VIENNA.

(*From our own Correspondent.*)

GASTRO-ENTEROSTOMY.

In removing a carcinoma of the pylorus, if too much of the stomach have to be included in the excision, the sutures—especially if of catgut—between the thick gastric wall and the thin duodenum usually relax in consequence of the great tension; for cases in which the stomach cannot be united with the duodenum, Dr. Woelfler has employed gastro-enterostomy in order to prolong the life of the patient. The stomach is united with the coils of the small intestine above the carcinoma, so that the food proceeds direct into the small intestine, eluding the pylorus and the duodenum. The method is only a palliative one, its object being to avert stenosis, as the carcinomatous masses remain behind. Professor Billroth has modified the method in the following manner. He operates like Woelfler, then he excises the stomach, lifts up the carcinoma, unites the viscus with the small intestine, loosens the carcinoma, and finally cuts it off, so that the food proceeds direct into the small intestine, and the duodenum is, so to say, an enormously lengthened ductus choledochus. A few weeks ago Professor Billroth operated in this way on a decrepit patient, who recovered satisfactorily.

DIAGNOSIS OF CARCINOMA.

Mr. E. Freund, a medical student, has described a method of diagnosing carcinoma with very few chemical aids in every stage of its development. He says there is in the blood of carcinomatous individuals a reducible substance, which he supposes to be sugar; and the blood of sarcomatous individuals contains an unusual amount of peptone. In cases of carcinoma diabetes was excluded, as was leukæmia in cases of sarcoma. In both diseases only a very small quantity of blood should be examined. In sixty-two cases of carcinoma, after the albuminous products had been removed with sesquichloride of iron and nitric acid, there was found in 0·3 cubic centimetre of blood a substance which distinctly reduced Fehling's solution. In eight cases the blood had to be heated for a few minutes with dilute muriatic acid, and glycogen, as such, could then be proved. After extirpation the sugar in the blood disappeared; in one case only it persisted, in which relapse took place. In fifteen cases of sarcoma, after the removal of the albuminous contents, peptone could distinctly be found.

TRANSFORMATION OF PUTREFACTIVE BACTERIA.

Professor Stricker recently communicated to the I. a. R. Society of Physicians the information that Professor Spina had succeeded in transforming putrefactive bacteria in the course of two days, and that they show the same behaviour towards methyl-violet as tubercle bacilli. Professor Stricker and Dr. Amrus have repeated these experiments, which corroborate Professor Spina's statements.

THE GENERAL EFFECT OF COCAINE.

In a lecture delivered recently Dr. S. Frend described some experiments he had made to illustrate the stimulating and restorative power exerted by the muriate of cocaine. The exhilarating effect of the ingestion of from 0·05 to 0·10 gramme of the drug lasts four or five hours, and disappears by degrees without being followed by depression. This effect of cocaine can be tested by the dynamometer. Under the influence of 0·10 gramme of cocaine an increase of power of pressure of the right hand of 2 to 4 kilogrammes, and of that of both hands of 3 to 6 kilogrammes, has been registered. This effect ensues shortly after the taking of the drug, and is best shown if it is taken while the system is in a condition of great depression. The daily fluctuation of the muscular strength which takes place in correspondence with the daily fluctuation of the bodily temperature, as shown by Dr. Max Bruch, is also to be taken into account in studying the effect of cocaine on the motor power.

Vienna, March 19th.

MEDICAL NOTES IN PARLIAMENT.

The Insane Poor.

In the House of Commons on the 26th ult., Sir Charle Dilke, in reply to Mr. W. Corbet, stated that the return o poor rates and pauperism just issued does not give th total number of insane persons maintained at the publi ense. The numbers given in that return are of the pauper atics maintained by the guardians at the cost of the poor s, and do not include the insane who are maintained by counties and boroughs at the cost of the county and ough rates. The return which was prepared by the mmissioners in Lunacy and presented to the House in e, 1883, contains, so far as the Board are aware, the est information available on this subject.

Lunatic Asylums in Ireland.

n the 30th ult., in reply to Mr. A. O'Connor, Mr. Campbell-nerman said that there has not been time to ascertain exact present condition of affairs in each lunatic asylum reland, but he believed there is no doubt that in some lums the number of patients is in excess of the nominal ommodation, although, taking the country as a whole, re is more accommodation than is actually required. The d Lieutenant gives immediate and full attention to any resentations made to him on this subject. Several lums have already been extended, and extensions are ng or are about to be effected in others.

Sixpenny Telegrams.

Mr. Shaw-Lefevre stated that it has been decided that the tariff shall come into force on Aug. 1st next.

Small-pox and Vaccination.

n the 31st ult., Mr. G. Russell stated, in reply to Mr. pwood, that the Local Government Board have no reason doubt that the statement in the pamphlet entitled acts concerning Vaccination," sanctioned by his depart-nt, that "none of the nurses at any of the London small-x hospitals who have been duly revaccinated before ering on their duties have ever caught small-pox" is sub-ntially correct, although it might have been more rdedly expressed. From the report of the medical erintendent of the Fulham Hospital in March, 1882, it eared that at Fulham 42 out of a staff of 295 had had all-pox, at Stockwell 16 out of 340, and at Deptford 20 of 265.

Obituary.

REES HOPKINS, L.R.C.P., M.R.C.S.

Mr. Hopkins of Pontypridd, whose death occurred, in the rty-first year of his age, on the 1st ult., was born near antrissant. He commenced life as a veterinary surgeon at ontypridd, and this vocation he pursued for some years ith marked success. He afterwards commenced a course f professional study at the London Hospital, and in 1872 btained the diplomas of Member of the Royal College of urgeons and Licentiate of the Royal College of Physicians. e was medical officer to the Pontypridd Board of Health d the Rural Sanitary Authority, and held several other ublic appointments.

Medical News.

Royal College of Surgeons in Ireland.—At xaminations held on March 23rd and following days, the ndermentioned passed in Anatomy, Physiology, and ateria Medica:—

J. A. Coen, A. R. S. Craig, J. Duncan, J. D. O'D. Egan, R. Elliott, E. W. Hamilton, J. C. Hines, A. M. Hunt, E. B. Kennedy, A. D. Macleod, A. E. Murphy, V. Nash, H. F. C. Pilcher, J. A. Scully, A. F. Smith, P. Stephenson, W. Stritch, W. Swan, W. E. Waters, J. A. Whitty, D. T. Wylie.

Apothecaries' Hall.—The following gentlemen ssed their examination in the Science and Practice of Medi-ne, and received certificates to practise, on the 19th ult.:—

Mumford, Alfred Alexander, Manchester School of Medicine.

The following passed on the 26th ult.:—

Caskey, John Shaw, London Hospital.
Rhys, Watkin Llewellyn, Guy's Hospital.
Sutherland, John Russell, Glasgow University.
Walker, Thomas Greaves, London Hospital.

Dr. Smyth is a candidate for the vacant coronership North Kildare, and it is generally expected that he will returned.

A suggestion has been offered that the "Great Eastern" steamship should be utilised as a floating hospital at Suakim.

The salary of Dr. Cowen, medical officer of the Shadwell-road Workhouse, Islington Union, has been increased from £50 to £80 per annum.

Dr. G. P. O'Farrell of Boyle, and Dr. John Todd of Newtown Stewart, have been appointed medical inspectors under the Local Government Board, Ireland.

Spanish Universities.—The number of students who graduated in the Spanish Universities last year was 3598, including 94 doctors, in various faculties, 535 licentiates in law, and 703 licentiates in medicine and pharmacy.

The Manchester Hospital Sunday and Saturday Funds.—The amount paid into the bank up to the present time to the credit of Hospital Sunday Fund is £4745, and on account of Hospital Saturday, £3063, making a total of £7808.

Royal College of Surgeons.—Owing to the unprecedentedly large number of candidates for the "primary," or anatomical and physiological examination for the diploma of membership, amounting to upwards of 400, the library and museum of the College will be closed on Tuesday and Wednesday, the 7th and 8th inst.

On Tuesday last, Mr. Alderman Walmsley, M.R.C.S., of Salford, presided at a meeting of medical practitioners of Manchester, held at the old town hall, for the purpose of taking steps to found a new Medical Society in the city. A resolution was carried pledging the meeting to promote the object in view, if possible in harmony with the existing Medical Society.

Electric Light for Hospital Ships.—The Metropolitan Asylums Board has contracted with a Manchester firm for lighting by means of electricity the hospital ships and buildings at Long Reach. The plant will be in duplicate throughout, and a considerable saving will be effected in the annual cost of lighting by the substitution of electricity for oil.

Infectious Disease Hospital at Birkenhead.—On the afternoon of the 31st ult., the new ward which has been added to the hospital for the treatment of infectious diseases at the back of the Borough Hospital, Birkenhead, was formally opened by Mr. Frederick Smith, chairman of the Health Committee of the Corporation. The new ward has cost about £600.

University College Hospital.—The annual general meeting of the donors, governors, and subscribers of this institution was held on the 31st ult. The number of in-patients treated during the past year was 3152, as against 2849 in 1883, and of out-patients 33,743, as compared with 24,187. The annual subscriptions amounted to £2047, and the total reliable income to a little over £6000, whilst the necessary annual expenditure reaches £19,000.

The Royal Commission on the Housing of the Poor.—It is stated that arrangements have now been completed for the visit of the Royal Commission on the Housing of the Poor to Scotland. The visit is not one of inspection, but simply for the taking of evidence. The Commission will sit this day (Saturday), Monday, Tuesday, and Wednesday, and possibly for a few days longer. The Commission will probably visit Dublin during the Whitsuntide recess.

Lower Thames Valley Drainage.—The Local Government Board have addressed to the clerks of several constituent authorities comprised in the Lower Thames Valley Main Sewerage Board a letter, dated March 26th, stating the decision of the Local Government Board, after careful consideration of the report of their inspector (Mr. J. Thornhill Harrison, C.E.), on the recent inquiry held by him as to the proposal that certain of the districts now included in the Lower Thames Valley Main Sewerage Board should be separated from that district. The letter deals first with the application of the Heston and Isleworth Local Board, and states that the Board have determined, if the Local Board, after further consideration of the matter desire it, to issue a provisional order separating the districts of Heston and Isleworth from the main sewerage district. With regard to the separation of other districts as to which opposition was made, the Board are not prepared to issue a provisional order for the dissolution of the main sewerage district, or the separation of any constituent portion, with the exception of the two above-named districts. The letter also states that the Local Government Board are of opinion that before the Joint Board arrive at a final decision with regard to Sir J. Bazalgette's scheme (which, in the event of its adoption, should be carefully revised and perfected before it is submitted to the Board) they should fully consider whether it might not be practicable to adopt some other scheme which would provide for the disposal of the sewage outside the district of the Joint Board, and which would entail less cost.

Prize Subjects in Barcelona.—The following subjects have been chosen by the Royal Academy of Medicine and Surgery of Barcelona, for the annual prize dissertations this year:—1. Description of an Epidemic in Spain. 2. Best Method of preparing Cocaine. 3. Medical Topography of some District in Spain. 4. History and Present State of Hygienic Education in Spain.

Presentation.—On January 17th last a testimonial of 1000 rupees, which had been subscribed by the tea-planters and other residents of Kursung and the Terai (Bengal), with an address, was presented to Dr. A. B. Morris, who for the last ten years has practised as "planters' doctor" in that place, but the state of whose health is such that a change to a colder climate is considered necessary. Dr. Morris has gone to Auckland, New Zealand, where he hopes to found a practice.

Oxford Water-supply.—The informal committee appointed in June last to investigate this subject has submitted several samples to the analysis of Dr. Frankland and Dr. Tidy. Their reports were on the whole not unfavourable, but the water company has made the proposal to draw its supply from the Thames at King's Weir, some three miles above Oxford; and this plan, according to Professor Prestwich, seems to offer, apart from the question of cost, the best and most abundant supply of river water. He thinks "that with water drawn from this source, with proper settling reservoirs, and with the efficient filtering reservoirs now in course of construction, the water-supply of Oxford would in the future be as good and as abundant as could be ordinarily obtained from a river source, and that there would be little risk of a recurrence of those conditions to which there has been at times so much reason to object."

Royal College of Surgeons in Ireland.—Medical School.—The following prizes have been awarded at the termination of the winter session 1884-85:—Descriptive Anatomy: Senior Medal, Mr. Powell; First Class Certificates, Messrs. Bewley, Cummings, Strangman, and Nelson; Second Class Certificates, Messrs. Barter, Beamish, Ferguson, and Gourley. Practical Anatomy: Senior Medal, J. Lagan; First Class Certificates, Messrs. Matthews, Fenton, Hickey, O'Donohoe, Reid, Rossiter, Strangman, C. Woodwright, W. Woodwright, and Cook. Descriptive Anatomy: Junior Medals, Messrs. Gore and Johnston; First Class Certificates, Messrs. Banks, Ewing, Summers, and Jennings; Second Class Certificates, Messrs. Bruland, Lyons, Green, Molloy, McMunn, Clarke, Stewart, Harding, Finnegan, and Lee. Practical Anatomy: Junior Medals, Messrs. Byrne and Gourley; First Class Certificates, Messrs. Gore, Johnston, Marwood, Beamish, Cummings, O'Rafferty, Nelson, Lyons, Hanks, Barter, and Cremin.

Society for the Study and Cure of Inebriety.—The annual meeting of this Society will be held on Tuesday afternoon, the 7th inst., in the rooms of the Medical Society, Chandos-street, W., at four o'clock, when, after an address by the President, Dr. Norman Kerr, a paper will be read by Dr. T. D. Crother, Hartford, on "The Incipient Stages of Inebriety." The following have been elected officers for the year:—President: Dr. Norman Kerr. Vice-presidents: Sirs G. Burrows, W. Miller, G. H. Porter, E. Saunders, and Spencer Wells; Professors B. Foster, Macalister, McKendrick, and Maclagan; Surgeon-General Logie; Drs. J. S. Bristowe, Cameron, M.P., W. B. Carpenter, Farquharson, M.P., C. J. Hare, Geo. Harley, Wm. Ogle, B. W. Richardson, W. H. Walshe, and C. J. Wheelhouse. Treasurer: Dr. Drysdale. Hon. Secretary; Dr. Sturrock. Council: Surgeon-General C. R. Francis; Surgeons-Major Evatt and G. K. Roole; Drs. Balding, Barnes, Beverley, Bridgewater, Alfred Carpenter, J. Eastwood, Fitch, Gibson, Haynes, Hicks, Hurry, Lindsay, Reddie, Robertson, and Thomas.

The Premonitory Symptoms of Insanity.— Henry Sutherland read a paper on the above subje Brighton on March 24th, at the meeting of the So Eastern Branch of the British Medical Association. In paper it was shown by cases which had been for a long under observation, that various eccentric acts sometimes many (seven, twelve, fourteen) years before the actual out of insanity takes place. Hence the necessity for early prop lactic treatment in cases where the insane temperame strongly marked. The mental and bodily symptoms usu noticed in the early stages, and the indications for vari drugs, were also enumerated. The importance of approp moral and hygienic treatment was also insisted on. By tention to these details a second attack was often aver and if insanity had actually seized the patient, the dura of the disorder was shorter and the outlook more hop than would have been the case had treatment been neglect

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The La *before 9 o'clock on Thursday Morning at the latest.*

Davies, Sidney, M.A., M.B.Oxon., M.R.C.S. (of Cairo), has b appointed Médecin en Chef de la Police et de la Gendarm Egyptienne.

Dendy, Walter C., F.R.C.S.Eng., L.R.C.P., has been appo Assistant Medical Officer to the Workhouse of Birmingham Pa vice Williams, resigned.

Fraser, James A., L.R.C.P.Lond., M.R.C.S., has been appo Medical Officer to the Workhouse of the Romford Union, v Davey, resigned.

Garner, John Edward, M.D., C.M.Aber., has been reappo Medical Officer for the First District of the Preston Union.

McCracken, John, M.B., C.M.Glas., has been appointed Med Officer for the Coxwold District of the Easingwold Union, v Steven, resigned.

Matheson, Farquhar, M.B., C.M.Aber., has been appointed Honorar Aurist to the Royal Caledonian Asylum.

Murray, H. Montague, M.D., M.R.C.P., has been elected Honorar Physician to the Foundling Hospital, vice Dr. A. Tweedi deceased.

Smith, Henry Lionel, L.K.Q.C.P.I., L.R.C.S.I., has been appointe Medical Officer for the Overburg District of the Tewkesbury Unio vice Heslop, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Buzzard.—On the 28th ult., at Grosvenor-street, W., the wife Thomas Buzzard, M.D., of a daughter.

Fleck.—On the 27th ult., at Frogmoor Lodge, High Wycombe, Bu the wife of William Fleck, M.D., of a daughter.

Hett.—On the 27th ult., at Inverness-terrace, the wife of Geoff Hett, M.D., of a son.

Hoysted.—On the 31st ult., at 17, The Avenue, Colchester, the wife John Hoysted, Surgeon, Medical Staff, of a daughter.

Pedley.—On the 22nd ult., at 25, Burnley-road, Stockwell, S.W., t wife of R. Denison Pedley, L.D.S., M.R.C.S.Eng., of a daughter.

Stamper.—On the 28th ult., at Pembroke Dock, the wife of J. Fent Stamper, M.D., of a son.

MARRIAGES.

Harrisson—Freeborn.—On the 25th ult., at St. Mark's, Kenning John W. Harrisson, M.B., of The Friars, Sandwich, to Charlo E. Freeborn, second daughter of the late Dr. R. Fernandez Free of Oxford.

Whitelegge—Horsley.—On the 23rd ult., at St. Margare Westminster, Benjamin Arthur Whitelegge, M.D., to F Marian, elder daughter of J. C. Horsley, Esq., R.A., of High Kensington.

DEATHS.

Bridgman.—On the 19th ult., at Berkeley, Gloucestershire, Isaac Thomas Bridgman, Surgeon, aged 43.

Hastings.—On the 25th ult., at Mansfield-street, Portland-place, William Hastings, M.D., in his 56th year.

Pearse.—On the 28th ult., at Godfrey House, Cheltenham, Ge Pearse, M.D., late Director-General, Madras Medical and Honorary Physician to Her Majesty, aged 88.

Steil.—On the 25th ult., suddenly, at 110, Shepherd's-bush-road, W. Kensington-park, W., George Robert Steil, L.R.C.P., M.R.C. youngest son of James Steil, Esq., R.N., in his 35th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

ledical Diary for the ensuing Week.

Monday, April 6.

al London Ophthalmic Hospital, Moorfields.—Operations, 10.30 a.m., and each day at the same hour.

tal Westminster Ophthalmic Hospital.—Operations, 1.30 p.m., and each day at the same hour.

Mark's Hospital.—Operations, 2 p.m., and on Tuesdays at the same hour.

ipital for Women, Soho-square.—Operations, 2 p.m., and on Thursday at the same hour.

tropolitan Free Hospital.—Operations, 2 p.m.

al Orthopædic Hospital.—Operations, 2 p.m.

al Institution.—5 p.m. General Monthly Meeting.

Tuesday, April 7.

's Hospital.—Operations, 1.30 p.m., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 p.m.

Thomas's Hospital.—Ophthalmic Operations, 4 p.m.; Friday, 2 p.m.

cer Hospital, Brompton.—Operations, 2.30 p.m.; Saturday, 2.30 p.m.

stminster Hospital.—Operations, 2 p.m.

st London Hospital.—Operations, 2.30 p.m.

tral London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

hological Society of London.—8.30 p.m. Dr. Dickinson: Violet Pigment discharged from the Mouth.—Dr. Carrington: Atrophy of the Liver.—Dr. Charlewood Turner: (1) Rupture of the Aorta; (2) Ulceration of Aortic Valves and Aorta (card); (3) Aneurysm of Splenic Artery (card).—Dr. Parry Price: Deposit of Bone in Testis and Epididymis.—Dr. Colcott Fox: Thrombosis of the Vena Cava, &c.—Dr. Norman Moore: (1) Cavity in the Lung of an Infant; (2) Renal Disease in an Ox (card).—Dr. Silcock: Congenital Sarcoma of Testis.—Mr. R. W. Parker: Congenital Sarcoma of Testis (card).—Dr. Chaffey: (1) Early Sarcoma of Testis (card); (2) Congenital Malformation of the Pulmonary Veins (card); (3) Congenital Malformation of the Heart (card).—Dr. Ernest Clarke: Congenital Malformation of the Heart (card).

Wednesday, April 8.

ional Orthopædic Hospital.—Operations, 10 a.m.

dlesex Hospital.—Operations, 1 p.m.

Bartholomew's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 p.m.

Mary's Hospital.—Operations, 1.30 p.m. Skin Department: 9.30 a.m., on Tuesdays and Fridays.

Thomas's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.

don Hospital.—Operations, 2 p.m., and on Thursday and Saturday at the same hour.

at Northern Central Hospital.—Operations, 2 p.m.

aritan Free Hospital for Women and Children.—Operations, 2.30 p.m.

versity College Hospital.—Operations, 2 p.m.; Saturday, 2 p.m. Skin Department: 1.45 p.m.; Saturday, 9.15 a.m.

al Free Hospital.—Operations, 2 p.m.

g's College Hospital.—Operations, 3 to 4 p.m.

al Microscopical Society.—8 p.m. Dr. C. T. Hudson: New Floscules.—Dr. J. D. Cox: Structure of the Diatom Shell; Siliceous Films too thin to show a Broken Edge.—Mr. H. Mills: Filamentous Projections of Diatoms.—Exhibition of Nobert's Diamonds.

tish Gynæcological Society.—8.30 p.m. Specimens will be shown by Dr. Fancourt Barnes, Mr. Lawson Tait, Mr. Reeves, and others.—Dr. Aveling: A Case of Double Pyo-salpinx.—Mr. Lawson Tait: A Case of Pyo-salpinx.—Dr. Bantock: A Case of Hydro-salpinx.—Dr. Lamprey: A Case of Double Monstrosity.

Thursday, April 9.

George's Hospital.—Operations, 1 p.m.

Bartholomew's Hospital.—Surgical Consultations, 1.30 p.m.

aring-cross Hospital.—Operations, 2 p.m.

th-West London Hospital.—Operations, 2.30 p.m.

Friday, April 10.

George's Hospital.—Ophthalmic Operations, 1.30 p.m.

al South London Ophthalmic Hospital.—Operations, 2 p.m.

g's College Hospital.—Operations, 2 p.m.

st London Medico-Chirurgical Society.—8 p.m. Mr. Percy Dunn will show Calvarium from Hernia Cerebri after Trephining in a Child; Splenic Infarct from Pyæmia; Secondary Scirrhus of Posterior Wall of Left Auricle.—Mr. C. B. Keetley: Two Cases of Osteotomy of the Hip; Radical Cure of Umbilical Hernia.—Mr. S. Benton: A Successful Case of Colotomy.—Mr. C. W. Chapman: A Case of Suppurating Cyst of the Liver (probably hydatid); recovery.—Mr. E. Noble Smith: Illustrations of some Orthopædic Cases.—Mr. T. Pickering Pick: Subcutaneous Division of Sphincter Ani.

ical Society of London.—8.30 p.m. Dr. Lewis Marshall (Nottingham): Cases of Amputation at the Hip-joint by Furneaux Jordan's Method.—Mr. Jonathan Hutchinson: Amputation at the Hip-joint in certain Desperate Cases.—Dr. Colcott Fox: Pityriasis Circine (Horand) and Pityriasis Circiné Marginé (Vidal).—Dr. Sidney Phillips: A Case of Sporadic Cretinism (living specimen).—Mr. Strugnell: A Case of Complete Paralysis of the Right Fifth Nerve.

Saturday, April 11.

's College Hospital.—Operations, 1 p.m.

al Free Hospital.—Operations, 2 p.m.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

The Lancet Office, April 1st, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
Mar. 27	29·86	N.W.	46	42	...	52	42	·08	Cloudy
„ 28	30·37	N.	42	37	...	50	38	...	Hazy
„ 29	30·14	S.E.	47	41	...	51	37	...	Fine
„ 30	30·18	S.E.	48	42	...	56	41	...	Hazy
„ 31	30·31	E.	43	37	...	57	35	...	Hazy
Apl. 1	29·90	W.	45	42	...	58	40	...	Fine

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of The Lancet *to be addressed "To the Publisher."*

SPONTANEOUS EVOLUTION.

To the Editor of The Lancet.

Sir,—The following case, which occurred at Guy's Hospital, is, I think, worth recording, as there are several points of interest in connexion with it.

C. H——, aged forty-three years, eleventh confinement. Labour commenced at 11 p.m. on the 8th. The extern was sent for, and on arrival found that the breech was presenting in the first position. Labour progressed rapidly, and the child was born alive at 11.40 p.m. It was then found that there was a second child in utero, but the presentation was not made out. At 12 p.m. (twenty minutes after the birth of the first child), the pains being absent, a drachm of the liquid extract of ergot was administered. The pains came on rapidly, and the right hand of the child was extended through the os. On this the extern sent for me. On arrival, I found that the child was born, the hand having descended still further, until both it and part of the forearm were outside the vulva. The pains now increased in severity. The right side and buttock of the child were born next, the right hand and forearm remaining outside the vulva; the head followed shortly afterwards, the left hand being extended over it. Artificial respiration was employed for about twelve minutes before the child breathed. Both were female children, the last born being exceedingly small.

In cases of spontaneous evolution like the foregoing it is extremely rare to find the child born alive. In this case several circumstances were favourable. (1) The first child had already enlarged the passages; (2) the woman had had ten children before; (3) the small size of the child. I weighed the child a month later, when it turned the scale at 3 lb. 12 oz.—Believe me, Sir, your obedient servant,

C. Y. Shuter, M.B.,
March 16th, 1885. Resident Obstetric, Guy's Hospital.

Dr. A. Harkin (Belfast).—Our correspondent will find a full account of the subject in the Comptes Rendus de la Société de Biologie, published by M. G. Masson, 120, Boulevard St. Germain, Paris.

Kentigern will no doubt obtain the information he desires from the registrar of the College.

EFFECTS OF HANDLING DYNAMITE.

To the Editor of The Lancet.

Sir,—I shall be glad if any information can be given how to avoid the unpleasant consequences of handling dynamite. Two officers of the Royal Engineers employed on the fortifications here have both complained of a bad headache lasting for about twenty-four hours after handling this substance, and also sore eyes. One of them made use of gloves, but a headache still resulted, apparently from the smell. I was not aware that nitro-glycerine acted through the medium of the skin or atmosphere, and no mention of this is made in Ringer's Therapeutics. I am, Sir, yours truly,

Aden, March 18th, 1885. E. Colson, Surgeon-Major.

DR. CHANDELON'S PROCESS FOR DETECTING STRYCHNINE.

BY this method the objects to be tested are chopped up very fine, and are mixed with an equal weight of gypsum entirely freed from water. After drying, the whole is pulverised, and thoroughly boiled with 90 per cent. alcohol, to which a little tartaric acid has been added. The alcohol is removed by distillation after filtration, the residue being taken up with boiling water, filtered so as to remove all fat, compressed to 1¼ to 1¾ cubic inch, and mixed with gypsum. After stiffening and pulverising, the mass is treated with chloroform in Soxblet's apparatus. The chloroform extract is brought to ¾ or 1 cubic inch, and there is added an equal volume of a saturated solution of oxalic acid in ether. The oxalate of strychnine becomes crystallised in needle-shaped forms, from which the strychnine can be isolated by ammonia. This method is said to have been successful in detecting minute quantities of strychnine, and to be likewise applicable to tests for brucine, narceine, papaverine, thebaine, aconitine, atropine, hyoscyamine, veratrine, nicotine, and coniine.

Mr. T. A. Buck, M.B.—We must refer our correspondent to some remarks on the subject in our issue of Sept. 27th, 1881.

"THE PHARMACY OF COCAINE."

To the Editor of THE LANCET.

SIR,—In an annotation on this subject in your issue of March 14th attention is drawn to a method for the preservation of solutions of cocaine by means of filtration through animal charcoal and subsequent addition of salicylic acid. I would point out to those who adopt this method the fact that animal charcoal removes alkaloid as well as impurities, and that filtration through this medium is calculated to seriously weaken the strength of cocaine solutions, especially those containing the smaller percentages of the salt. The preservation of these solutions is well effected by the use of salicylic acid alone, as recommended by Dr. Squibb of Brooklyn, employing a saturated solution of the acid in distilled water, to the extent of 50 per cent., or one-half, of the finished solution of cocaine—i.e., one-half water, and the other half solution of salicylic acid. The proportion of salicylic acid contained in the whole is then about 1 in 600, a quantity quite unobjectionable in use, but sufficient for the purposes of preservation. The alleged objection to its use on account of its extreme sensitiveness to traces of iron, and consequent difficulty in obtaining colourless solutions, we have not found realised in practice. We find no difficulty in sending out colourless solutions thus protected. The cocaine salts of our manufacture are not allowed to come in contact with iron at any stage of the process, glass and porcelain being alone employed. It was well pointed out by Mr. Symes in your issue of March 21st that an excess of acid destroys or renders latent the anæsthetic power of cocaine salts, as, so far as we are aware, this important fact had escaped record, although probably not observation. The addition of an acid to effect solution of the cocaine salt is entirely unnecessary if the neutral hydrochlorate be used. The alkaloid itself would be the most powerful, but its slight solubility (1 in about 700) almost precludes its use, although even in this high state of dilution it still has the characteristic benumbing effect on the tongue. The most important impurity in cocaine salts observed up to the present is the supposed inert alkaloid hygrine which exists in the leaves in variable proportion, and which, being considerably more soluble in water than cocaine, can be readily separated by prolonged washing and repeated reprecipitation of the cocaine, a process which also causes considerable diminution in the field of the latter, if means are not adopted for its subsequent recovery from the washings. Tests for the identification and purity of cocaine salts are greatly needed at the present time. For the first we know of no chemical tests available for the purpose. Its reactions are similar to those of other alkaloids; its anæsthetic effect on the tongue and other mucous surfaces is, however, sufficient for its identification. But this test is no guarantee of its purity; a small admixture of cocaine with other substances would produce its characteristic effect. Perhaps the most satisfactory test of purity is the amount of alkaloid precipitated by means of a solution of sodic carbonate from a weighed quantity of the cocaine salt. In the case of the neutral hydrochlorate this should amount, when moderately washed and dried until the weight is constant, to at least 89 per cent.

We are, Sir, yours faithfully,

High Cross, Tottenham, March 25th, 1885. TANNER & CO.

Mr. Hamilton Cartwright.—Would it not be better to bring the matter under the notice of the College of Surgeons?

Mr. Gem.—The report will appear in an early number.

"APPLICATION OF MIDWIFERY FORCEPS."

To the Editor of THE LANCET.

SIR,—As many letters have appeared in your journal on this subject, there is yet another method—namely, "with the patient directly on the back." This position obviates the necessity for drawing the patient over the edge of the bed, and can be more easily employed where the bedding is on the floor, as may occasionally be the case. In a manual on midwifery which has recently reached its fourth edition there is no allusion to this position. The manipulation of the superior blade is similar to the manner described by Mr. Lucas. As everybody appears to be conversant with Mr. Lucas's easy method, I would give him the satisfaction of knowing that it is new to me. I am, Sir, yours truly,

March 14th, 1885. BEAVER.

DISCOUNT IN DRUG BILLS.

A PETITION has been presented to the College of Pharmacists of Mi praying that any members who may be guilty of selling drugs to corporations, societies, or charitable establishments at any considerable reduction from the recognised price may be expelled. The Mi medical journal which reports this thinks that if it is carried into effect the College will have to expel a large number of its members—in fact, nearly all those who happen to supply public institutions.

A Country Doctor.—Our correspondent seems entirely right. But still think his case would be more complete with some personal remonstrance, preferably an interview.

M.B.Lond.—The letter has been already published in a contemporary

FLOATING DISPENSARIES FOR FISHERMEN.

To the Editor of THE LANCET.

SIR,—Through the kindness of a gentleman much interested in the North Sea Fishing Fleets, I had an opportunity last August of spending a fortnight on board one of the mission ships belonging to the Mission to Deep Sea Fishermen. What I then witnessed has induced me to bring the subject before the medical profession, in the hope that they will lend their aid towards alleviating the sufferings which smacksmen have to undergo, owing to the inefficient supply of medicines and medical appliances available in cases of illness. During the entire year a floating population of over 12,000 men and boys are at work in the North Sea, trawling for the fish with which Billingsgate and other markets are supplied. This great fleet is divided into eight minor fleets, each under the command of an "admiral," a sailor selected for his long experience and thorough technical knowledge, who, by means of flag signals by day and rockets at night, indicates the direction in which boats should sail, and the times for lowering and hauling up the trawls. The nature of the occupation in which these sailors are engaged is tiresome, harassing, and dangerous in the extreme. For eight weeks continuously each trawler is at work, a period of nine days being then allowed the crew to return home to recruit themselves and refit the smacks. Sailing with this fleet are some vessels which, besides engaging in trawling as the other vessels, are used as mission ships, and which also act as floating dispensaries. Being only four in number, they attach themselves to four of the minor fleets. A medicine chest (which has been pronounced by one of the sailors to be "one of the greatest blessings in the fleet") is kept on board each of these ships; but the natural want of knowledge on the part of the skippers, combined with the extreme difficulty of dispensing small doses of powerful medicines on board a small craft in heavy seas, greatly diminishes the advantages to be derived from such a provision. Under these circumstances, I propose to furnish one of the fleets with a supply of concentrated medicines such as are found most generally useful in dispensary practice, directions being given on each bottle as to the complaints for which such medicine is to be employed. Further, to supply a number of empty graduated eight-ounce bottles, so that, the doses being marked, the use of (which for obvious reasons would be useless) can be dispensed with. The concentration of the medicine being uniform (one drachm to the ounce), the only dispensing necessary would be to take one of the empty bottles and a sufficiency of the concentrated mixture to fill graduated ounce space, and then fill the bottle with water, directing the patient to take a marked dose three or four times a day, according to the urgency of the case, thus obviating the use of measure glasses, table- dessert-spoon, or other superfluities unknown on board a trawler. After thus providing for one fleet, seven others remain in need of some such provision. I would therefore earnestly appeal to the members of the profession, in the hope that they will contribute towards this object by either becoming responsible for the supply of medicines to some of the fleets, or by sending to the Secretary of the Mission to Deep Sea Fishermen—E. J. Mather, Esq., 31, New Bridge-street, Ludgate-circus, E.C. contributions towards providing for the expenses of such.

May I express a hope that through the columns of your journal you will aid the project by giving to it that publicity which it merits, and thus eliciting aid, as well as suggestions, as to the best manner of working the system. An early expression of the views of the profession would much oblige, as I am making arrangements for again visiting the fleet at an early date.—I am, Sir, yours faithfully,

HENRY J. PENNY, L.R.C.S., L.K. & Q.C.P.I.

Shenley, Barnet, Herts.

A TITLE FOR APOTHECARIES.

To the Editor of THE LANCET.

SIR,—Having observed your reply to "L.S.A." in last week's LANCET, in which you stated that the titles of "Doctor" and "Surgeon-Accoucheur" were, though not illegal, not "warranted" by the holders of the licence of the Apothecaries' Society, might I ask the favour of an opinion from you upon the following:—I am in the habit of describing myself, with the same qualification, as "Licentiate in Medicine." I cannot call myself "Apothecary," as I practise with the full sanction of the law as a physician, and I think it to a certain extent immoral to describe myself as "Doctor" and "Surgeon-Accoucheur." It appears to me and my friends an zxcellent and honourable way out of the difficulty.

I am, Sir, your obedient servant,

March 28th, 1885. LICENSED IN MEDICINE.

*** We see no objection to the description our correspondent gives of his qualification.—ED. L.

D. writes: —"I shall be grateful if any of my professional brethren will advise me what is best to do (educationally) with a youth, ged thirteen, not idiotic, but yet of such defective mental capacity hat it would be out of the question to send him to any ordinary school. He is not more difficult to control than such cases usually ave. He is the only child of a widow with very limited means."

RAPID SPONTANEOUS RESOLUTION OF A DEPRESSED FRACTURE OF THE PARIETAL BONE.

To the Editor of THE LANCET.

SIR,—The following case may prove interesting to some of your aders.

At 3 P.M. on the 4th inst. A. P——, a child one year old, was brought me, having fallen from its nurse's arms. The mother told me that at e time of the accident the child became semi-convulsed, and livid for few minutes, but did not lose consciousness. When I first saw it, enty minutes after the accident, it was perfectly sensible, and parently in its usual condition. On examination, the skin was rmal; there was no bruising or swelling, but an indentation, an inch ng, two-thirds of an inch broad, and one-third of an inch at its epest part, occupied the position of the left parietal eminence. With e exception of a little tenderness on manipulation of the part, the ild was in no way inconvenienced, and so little was the disturbance, d so marked the depression, that I at once put it down to a malformation previously existing, but only now discovered and attributed to the cident. The mother, however, assured me that such was not the case, d she was duly dismissed with the necessary instructions as to the eatment of the child. On the next morning I saw the child; it was uite well, and without a trace of the accident of the previous day. e mother informed me that she had noticed that by 7 P.M. on the day the mishap the skull had resumed its normal appearance. The case pears to me to be remarkable in the following points:—1. The slightss of the shock and the rapid recovery from it, and the immunity from mptoms co-existing with such a state of affairs. 2. The situation and aracter of the depression; its taking place at the strongest and most oroughly ossified part of the bone, this being completely inverted, to n apparently greater extent than it was formerly convex, and this without any evidence of detachment or crepitation. 3. The rapidity of solution—i.e., four hours—showing the pliant nature of the bone, more especially of the inner table of it, at this age, and the force exersed by the blood pressure, and the rhythmical pulsation of the brain.

I am, Sir, yours truly,

Kettering, March 16th, 1885. JOHN GRANT, M.B., C.M. Edin.

PERMANGANATE OF POTASH IN AMENORRHŒA.

To the Editor of THE LANCET.

SIR,—I reported a case of amenorrhœa successfully treated with ermanganate of potash pills in THE LANCET of Jan. 24th, 1885. Since hen another case has been brought to a successful issue by the same reatment. M. C——, aged eighteen years, came under my care on arch 1st. The patient was by occupation a dressmaker in Dublin, where she had been under medical care for some time; but her health did not improve, and she returned home and consulted me for the following:—Short cough; pain in the cardiac region and in the small of the ack; pulse 100 and weak; tongue and gums anæmic; appetite bad; oft-blowing, systolic murmur; and amenorrhœa, that had lasted for ix months. I at once ordered her a tonic of iron, strychnine, and digitalis, with plenty of nourishment, and at the end of a week, when her general health was greatly improved, I ordered permanganate of potash pills, one grain each, one pill to be taken with each meal. Six of these pills produced the desired effect, and the catamenia appeared in a regular manner four weeks afterwards. She is now taking a course of Bland's pills. The murmur has vanished, and she is going on in a most satisfactory way. I remain, Sir, faithfully yours,

CHARLES P. MURRAY, M.D.

Ashfield, Beau Parc, co. Meath, March 25th, 1885.

Northumbriensis.—The Local Government Board may, upon the application of the sanitary authority, dispense with so much of the regulation specified in its circular as requires that the medical officer of health, being duly registered, shall be qualified to practise both medicine and surgery.

"HYDROCHLORATE OF COCAINE."

To the Editor of THE LANCET.

SIR,—It matters little to your readers whether Mr. Fenwick or Mr. Abbott suggested camphor water as a menstruum in which to preserve hydrochlorate of cocaine as a solution. The credit, however, belongs to the latter (THE LANCET, Feb. 14th, p. 315). My object in writing was to bear testimony to the value of such a solution, and to caution the profession against trusting to Mr. Churchyard's assumption that a solution in distilled water which had become flocculent could be rendered as active as when freshly prepared by the treatment he mentioned. It is well known that a solution of cocaine hydrochlorate is rendered weaker by being passed through animal charcoal, and, as I have stated, the addition of acid further reduces its activity. A 4 per cent. solution which has become flocculent may still possess some activity, and this is best retained by passing it through a small piece of good filtering paper and adding a fragment of camphor to the filtrate.

I am, Sir, yours faithfully,

Liverpool, March 25th, 1885. CHARLES SYKES.

MEASLES IN GUERNSEY.

A CORRESPONDENT informs us that an epidemic of measles in Guernsey has been made the subject of a paper in the *Glasgow Medical Journal* by one of the medical men there. This paper, it is alleged, has been printed separately, and sent by its author to one of the patients of another medical man holding a high official position in the island. It is an essential part of our correspondent's communication that the epidemic was of an ordinary kind, characterised by no unusual complications calling for comment, and that the mortality was small. Our opinion is asked as to the action of the author in distributing his paper to the patients of other medical men. We think that such a use of professional writing is better avoided.

PALATABLE PREDIGESTED FOOD.

To the Editor of THE LANCET.

SIR,—In the leader upon Diet in the Febrile State in your issue of March 21st, alluding to the use of "already partially digested foods" for the purpose of avoiding the "fermentative changes from delayed intestinal digestion," you say that "unfortunately the preparations hitherto proposed for this purpose do not combine palatableness with efficiency," further expressing the opinion that an improvement in the former of the conditions named is much to be desired. Seeing what weight of authority every utterance of yours has, it were to be wished you had qualified the statement by the words "some" or "most of"; since I can bear testimony (unsolicited, I need not say, and without interest) that one firm of chemists at least has solved the problem of making an efficient article agreeable in smell and taste as well. Everyone knows how seldom in our homes and sick-rooms, at the hands of our cooks or nurses, we ever get a really good cup of coffee or cocoa; and I am quite sure that, the prejudice of a first trial once over, the almost instantly prepared cup of peptonised cocoa and milk or coffee and milk would be preferred as richer and more delicate in flavour to what we usually have placed before us. And if a preparation is really nicer to a healthy palate, efficiency being ensured, how much fitter must it be for the fastidious or perverted taste of the sick? I have for some time made use of the above preparations in typhoid fever, in tubercular affections of the abdominal organs, in acute and chronic albuminuria, and in diabetes mellitus, as well as in varying degrees of gastric irritation—in brief, in a wide range of cases where impaired digestion was only a secondary or even hardly appreciable factor, and in all with more or less benefit. In one case of diabetes, carefully watched for a month, and the urine daily examined, somewhat (I admit) to my surprise, the administration morning and evening of one breakfast-cup of the peptonised cocoa and milk did not increase the excretion of sugar; all the other conditions being as nearly as possible alike during that period, the gluten loaf not being used, and the only drugs administered being salicylic acid with a quarter of a grain of codeia.

I am, Sir, yours truly,

March 25th, 1885. F. ARNOLD LEES, M.R.C.S. &c.

⁂ *Both cocoa and coffee undoubtedly disguise the peculiar flavour of peptonised food better than anything else; still, even thus prepared, peptonised preparations have, to our taste, in a slight degree the peculiar flavour, which to some persons is extremely unpleasant, of peptones, though in this respect they are superior to most dietetic articles of this kind.*—ED. L.

M.R.C.S.—We do not think it advisable to extend to such cases further publicity. The attention of the bodies whose qualifications the offenders hold should be called to the way in which their diplomas are disparaged.

"CARBOLIC OIL A REMEDY AGAINST MOSQUITOES."

To the Editor of THE LANCET.

SIR,—The unfortunately too frequent differences amongst doctors when they do ventilate their opinions may, so far as the above matter is concerned, be very easily explained. The application of carbolic acid and oil, in the proportion of 1 to 10 or 15, is for a time perfectly successful in keeping off mosquitoes; but the carbolic acid evaporates so rapidly that a renewal has to be made every half-hour or thereabouts. So far as my experience goes, there is no place where the sting of the mosquito is so venomous as on the banks of rivers and lakes, and after exposure in such places I have known men to be laid up and disfigured for weeks. By using the oil, and repeating its use every half hour or so, I have fished where all other fishers were half smothered with mosquito muslin wrapped round them—and in the tropics this is very heat-producing, even if effectual in keeping out the "wily mosquito"—with perfect impunity, and the only difficulty I had was to keep it out of my eyes, as it produces smart pain if it touches the conjunctiva. Put a bottle of freshly mixed acid and oil in your pocket, and apply it at frequent intervals on hands, neck, and face, and you may defy mosquitoes, gnats, *et hoc genus omne.* My experience includes the East and West coasts of Africa, the East and West Indies, North America, and the Arctic. The Arctic black gnat in summer is as annoying as any "punkah mosquito." Before I used carbolic oil I employed creasote and oil, and a mixture of it used to be sold at least a quarter of a century ago by the fishing tackle folk in the land of the "Blue Noses;" indeed, it was my experience there which led me to substitute the carbolic acid for the creasote. I am, Sir, yours faithfully,

March 23th, 1885.

AN OLD SALT.

HOMES FOR MENTAL CONVALESCENTS.

To the Editor of The Lancet.

Sir,—Amongst the many valuable institutions of the day is there not one greatly needed—convalescent homes for our pauper lunatic asylums? All medical men who superintend these asylums would, I believe, agree on the value of such convalescent homes, not only as preparing patients for return home when rallying, but as more likely to lead to recovery than at present is the case. And what a boon the change would be to those whose nervous system has been shattered!

> "The very air, the sun, the skies,
> Would seem like opening paradise."

And for those preparing for return to cottage homes, &c., would not a large farmhouse or some such home, with simplest furniture, but with possibly garden and poultry, be sufficient, and better than grander buildings? Such convalescent homes might be attainable without great outlay, as the patients would still be paid for, as at the asylums?

I am, Sir, yours faithfully,

March 30th, 1885. H. B.

*** Our correspondent will find, on referring to our issue of May 17th, 1884, a *letter from the Rev. H. Hawkins, Chaplain of Colney Hatch Asylum,* calling attention to the want of convalescent homes "to supplement the recovery of patients discharged from asylums for the insane." As we then pointed out, the need of such institutions has long been recognised.—Ed. L.

TWIN BIRTH IN WHICH ONE CHILD WAS AN ANENCEPHALUS.

To the Editor of The Lancet.

Sir,—On March 15th I delivered Mrs. B——, in her sixth confinement, of a living female child, and on perceiving two cords I examined, expecting to find a normal vertex presenting, as in the first case, instead of which I felt the cranial bones loosely covered with skin. Uterine action setting in, a fœtus was expelled, smaller than the first, perfectly developed as regards bodily conformation apparently. On section of the scalp not a vestige of brain tissue was to be seen, merely the membranes thickened and congested. The husband informed me that his wife received a severe shock seven months since at the sea-side, when she saw a hideous-looking man, and he states that the physiognomy of the encephalon corresponded exactly with the individual she then saw, it having the same depressed bridge of nose, &c. I should add that there was only one placenta. I am, Sir, yours faithfully,

Hollywood-road, S.W., March 24th, 1885. Wm. J. Heddy, M.R.C.S.

Mr. C. C. Burman (Belford, Northumberland).—The inquiries addressed to us are matters requiring careful investigation. We have found the paroxysms to be almost always more frequent at night, whether the patient sleep or not. In the early part of the course of the complaint the paroxysms frequently occur when the child is put to bed and at about 2 or 3 A.M. Profound or light sleep, in our experience, exercises but little influence; when sound sleep is possible, the attack is generally slight. Any striking alterations in the patient's environment may induce an attack.

PAIN IN THE FOOT AFTER HEMIPLEGIA.

To the Editor of The Lancet.

Sir,—Will you allow me to ask some of your readers if they can help me to relieve severe pain occurring paroxysmally in the foot after hemiplegia, accompanied with tingling and numbness. Ointments of aconite and belladonna have exasperated it. The patient *objects to hypodermic* injections. Would it be wise to try the constant current? I have failed so often that I do not wish to resort to this without previously having the benefit of other experience than my own.—Yours faithfully,

March 30th, 1885. H. G. D.

TRANSMISSION AND TRANSMUTATION OF DISEASE.

To the Editor of The Lancet.

Sir,—I shall be greatly obliged *if any members of* the profession furnish me from their own experience any of the following:—1. A tree showing the transmission of phthisis, gout, or rheumatism, (if possible) three generations and one or more collateral branches family. 2. Any instances of the transmutation by heredity of diseases—e.g., epilepsy, hysteria, alcoholism, &c., into insanity, or *versâ.* 3. Any good instances of the hereditary transmission of diseases. I am, Sir, yours faithfully,

Belfast, March 28th, 1885. James A. Lindsay, M.A., M.D.

Communications not noticed in our present number will receive tion in our next.

Communications, Letters, &c., have been received from—Sir He Thompson, Dr. Wilks, London; Dr. Saunders, London; Dr. Br Hicks; Dr. Maglioni, Monte Video; Surgeon-Major Colson, Mr. Aylmer Lewis, Oswestry; Dr. Charles Day, London; Dr. *Sydney Jones, Sydenham; Mr. Sturrock; Mr. T. L. K. Davies,* dudno; Mr. Haggard, London; Dr. Lindsay, Belfast; Dr. A. Batley; Mr. J. P. Wilton, Gloucester; Lady Cowper, Hertford; Davies, London; Mr. Arthur Neve; Mr. Thos. Lovatt, Sheerness; Mr. J. West, London; Mr. Pegler, Kurseing; Mr. Clifton Melbourne; Dr. Orchard, Manchester; Mr. H. W. Allingham, Dr. Boerner, Berlin; Mr. T. A. Buck; Mr. Hides, London; Dr. Hall, London; Dr. Ferguson, Cheltenham; Mr. C. C. Burman, ford; Deputy Surgeon-General Jackson; Mr. Uvedale West, on-Trent; Mr. J. E. Blomfield, Paris; Dr. C. F. Murray, Mr. W. A. Thomson, Ampthill; Messrs. W. V. Wright and London; Mr. Horton, Ben Rhydding; Messrs. Street and Co., hill; Mr. Twyford, Hanley; Dr. Pope; Messrs. Macmillan and Cambridge; Mr. Flinder, Islington; Messrs. Smith, Elder and London; Messrs. Whitehead and Co., Manchester; Mr. Robert Parkstone; Messrs. Fletcher and Co., Holloway; Professor Struthers, *Aberdeen; Miss Tudney, Leicester; Mr. Crozier;* Mr. Gallagher Bishop Auckland; Mr. Burcombe, Lincoln; Messrs. Beal and Brighton; Mr. McDougall, Torosay; Mr. Russell, Liverpool; Hewlett and Co., London; Mr. Webster; Mr. Ruddell, Mr. Grant, Birmingham; Mr. Watt, Hovingham; Mr. London; Dr. Croke, Hull; Dr. McKenzie; Dr. Sweeting, Kensington Mr. Fleck, High Wickham. Licensed in Medicine; H. G. D.; Croydon; Percy; Secretary, Royal Infirmary, Manchester; G. A.; Northumbriensis.

Letters, *each with enclosure*, are also acknowledged from—Mr. Mr. Parnell, Camden-town; Mr. Dresser, Darlington; Dr. Tutbury; Dr. Horton, Leominster; Dr. Potter, Bombay; Mr. Huddersfield; Mr. Medwill, Christchurch, New Zealand; Mr. man, Narracoorte; Mr. Bannasconi, Plymouth; Mr. Walker, dlesbro'; Dr. Pernisch; Miss Hunt, Dublin; Mr. Heywood, chester; Dr. Heelas, Isle of Wight; Mr. Robinson, Mrs. Cairns, Glasgow; Dr. Mumby, Suakim; Mr. Maywood, The Dean, Victoria University; E. P., Brecon; A. E., Wellington H. B., Newtown; W. B., Burnley; W. S., Aberdeen; Matron, Infirmary; P. L., Gravesend; Surgeon, Tunbridge Wells; Stafford Infirmary; Kennel Man, Ramsgate; Medicus, hampton; G. J., Cardiff.

Church of England Temperance Chronicle, Barnsley Chronicle, Herald, Mexborough Times, Sheffield Independent, Amateur South Wales Echo, South Wales Daily News, &c., have been received.

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Lumleian Lectures
ON
POINTS IN THE NATURAL HISTORY OF PRIMITIVE DRY PLEURISIES.

Delivered before the Royal College of Physicians,

By SIR ANDREW CLARK, Bart., M.D.,
FELLOW OF THE COLLEGE.

LECTURE III.

Mr. President and Gentlemen,—In the last lecture I arranged, for the sake of convenience, the pathological changes in the lung resulting from primitive dry pleurisies under four heads, and I intimated that for each of these there was to be found a corresponding clinical state or autonomy. I proceed now to consider these clinical states, to describe their chief characteristic signs, and to show in what manner they may be distinguished from other states resembling them, but having a different meaning and importance. The former, for descriptive purposes, I shall name the neoplastic pleural membrane state, the fibroid lung state, the bronchiectatic state, and the phthisical fibroid lung state.

And first of all, concerning the neogenetic pleural membrane state. The patient may have the aspect of health, and experience no subjective indications of the presence of disease. If any exist, they will be limited to uneasiness or pain in the affected side, an occasional dry cough, feverishness, and general malaise. On rare occasions the patient may be conscious of the existence of pleural friction. The physical signs are a slight decrease, with some irregularity, of the thoracic movements of the affected side, some diminution of the tactile vocal fremitus,[1] just notable but unequal dulness on percussion, a shifting, rubbing or grating friction, enfeebled breath sounds, and an altered vocal resonance. In some cases, instead of pleural friction there may be heard crepitation, crackling, or clicking; and we shall know from the superficial characters of these sounds, from their resistance to respiratory efforts, and from their association with gratings or rubbings that they are of pleural origin. Having thus before us a dry pleurisy, we have to determine if it is a primitive or secondary affection. If there are signs of disease in the corresponding or in the opposite lung, it is probable that the pleurisy is secondary; and if without such signs there is grave constitutional disorder, it is equally probable that the pleural inflammation has arisen out of some pre-existing malady; and this pre-existing malady may exercise its causal influence either through some local growth, such as tubercle, lying beyond the range of physical detection, or through some constitutional state, such as adenoma or syphilis. On the other hand, if there exist no signs of local disease, and no serious symptoms of constitutional disturbance, it is presumable that the case is one of primitive dry pleurisy. This affection may arise from mechanical injury, or from cold, and it may be a local expression of such non-malignant constitutional disorders as rheumatism and gout.

The future course of a case of primitive dry pleurisy depends upon causes seldom visible or calculable, and is therefore absolutely uncertain. The signs of the malady may subside in a few weeks, or they may continue for months, or they may come and go for two or three years, and then either entirely disappear or invade the lung. Sometimes after a variable duration the dry stage issues in serous effusion, which pursues its ordinary course, and ends eventually in a thickened pleura and a contracted lung. In one case seen with Dr. Sedgwick, and in another seen with Dr. Warrington, it appeared as if the structural elements of an old adventitious pleural membrane developed through metaplastic processes into malignant fibrous growths. This result, however, must be infinitely rare; and when the health of the patient is good, and he can be placed under the conditions most favourable to the organism, clinical experience will warrant the expectation of complete recovery. Nevertheless, it occasionally happens, in spite of apparent good health and skilful care, that the inflammatory process invades the lung and brings about therein a more or less extended fibroid induration. This fibroid lung state is of frequent occurrence, and from the mistakes liable to be made concerning it, and the course which it commonly follows, it is a subject of great importance as well as of great interest. It certainly demands, and will certainly repay, an extended and a critical study. We have, in the first place, to make sure that we are dealing with a fibroid lung state. What seems to be a simple fibroid induration[2] may be something quite different; or it may be that and something more. It may be essentially a tubercular consolidation with an unusually large amount of secondary fibroid growth; it may be a chronic caseous pneumonia; it may be a pleuritic effusion; it may be a malignant growth; and it might be several other things which for practical purposes need not now be considered. If the case has been followed from the beginning, no serious difficulties of diagnosis will be encountered; but if, as usually happens, the patient is not seen until the pulmonary consolidation is advanced, the greatest care will be required to avoid falling into serious error, and to succeed in framing a correct judgment. If there are no serious symptoms of constitutional distress; if there is no elevation of temperature and no hurry of circulation; if flesh, colour, and strength are little, if at all, affected; if in the consolidated lung there are no signs of disintegration, and in its fellow lung no indications of advancing and spreading disease,—the question of tuberculosis may be settled in the negative. And it may be so settled conclusively if after repeated examination of any sputum which may be ejected no tubercular bacilli are found therein.

With respect to caseous consolidations, they are of two sorts: one which is tubercular, and one which is not. From simple fibroid induration, the former may be distinguished by the presence of tubercular bacilli in the sputum. And as to the latter, if there is no history of a feverish illness; if there is no elevation of temperature, or quickness of the pulse, or cough, or expectoration; if there is material retraction of chest, with diminution of tactile vocal fremitus; if no râles are heard within or around the consolidated lung; and if the vocal resonance is either diminished or not increased,—then the hypothesis of any sort of caseous consolidation must be abandoned. Furthermore, if the patient has no cachectic appearance; if there are no irregular retractions of chest, no depression of shoulder and nipple, no pushing outwards of the lower part of the scapula; if, with extensive consolidation, there are no pains or signs of pressure, no extension of dulness beyond the normal limits of the lung, no displacement of heart, no distress of breathing with blood-stained expectoration, no rapidity of pulse without notable elevation of temperature,—it may be said with all but absolute certainty that a malignant growth is not the cause of the consolidation.

But in fibroid lung the condition which by far the most frequently gives rise to mistakes in diagnosis and errors in practice is pleural effusion. To mistake an ordinary and considerable serous effusion for a fibroid lung can happen only from want of competence or want of care. The fixed and rounded side; the tumid or even bulging intercostal spaces; the dulness, varying with position; the feeble breath sounds, except near the spine, where they are bronchial; the diminished resonances; the displaced organs,—if duly examined and considered forbid peremptorily every interpretation but one. Happily, however, the danger of mistake does not lie in this, but in an opposite direction; it lies in supposing that a solid fibroid lung is a fluid effusion. And here it must be confessed that, when the effusion is moderate in quantity and of long-standing, when the dulness does not vary with position and there is no displacement of organs, when the signs of local disease have descended from an acute pleurisy and there is no account of pulmonary disease, the difficulties of diagnosis are great and not always, without exploratory operations, overcome. For in both conditions, in the moderate fluid effusion and in the indurated lung, there are to be found diminished respiratory movements of the affected side, toneless dulness on percussion, decreased tactile vocal fremitus, feeble, hollow, or suppressed respiratory murmurs, and lowered as well as altered vocal resonances. Nor, indeed, do exploratory operations always overcome these difficulties. Fluid may be present, and none be withdrawn by the needle. It may not penetrate the thick and hard pleura; it may carry the membrane before it, or it may become blocked by débris. But, notwithstanding this close similarity of physical signs between affections so widely different, grounds of distinction between them, if narrowly sought for, may be in most cases discovered. In the first place, the continuous history of an illness beginning with an unmistakable pleurisy, and passing straight into a basic dulness of doubtful nature, points strongly, but not necessarily, to fluid effusion; not necessarily because a fibroid induration, although it sometimes originates and advances unattended by inflammatory or other local or general symptoms, occasionally arises in, or immediately follows, a pleural inflammation; or is begotten by substitution out of an unabsorbed pneumonic exudation. In the second place, if we are dealing with a fluid, and especially if that fluid be purulent, there will probably be present some degree of fever, and almost certainly some acceleration of pulse; in a fibroid consolidation there need be neither the one nor the other. In the third place, if fluid be present and confined to a portion of the pleural sac, the side, although generally flattened or retracted, will be swollen over the part where the fluid is collected; the intercostal spaces will be effaced or more or less bulged; the diminution of the tactile vocal fremitus will be uniform; the dulness on percussion will be more diminished in volume, raised in pitch, shortened in duration, and lessened in resistance than when dealing with a fibroid induration; the breath sounds will be feeble or suppressed; there will be no râles; and the vocal resonance lowered and altered may be ægophonic. In the fourth place, we may conclude that we are dealing with a solid lung if, with the signs already described, we find that the affected side is everywhere, and especially irregularly, contracted, that the intercostal spaces are deepened, that the dulness is accompanied by great hardening and resistance, that the tactile vocal fremitus, much diminished, is unequal throughout the dull region; that there is rubbing or creaking; that there are râles of any description, superficial or deep; that the vocal resonance, increased or diminished, and varying at different parts, has a metallic quality; and that there is some, however slight, displacement of organs to the affected side. Having thus cleared away the various sources of error in diagnosis, and having made sure that we are dealing with a fibroid lung, I proceed to set forth its clinical characters and course.

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[1] I do not forget that Dr. Walshe has spoken otherwise; and it is only after careful investigations, often repeated, that I venture to differ from one of the most accomplished auscultators of our time.

[2] Or, to use another terminology, an interstitial pneumonic consolidation, cirrhosis, sclerosis, or iron-grey induration.

I shall, in the first place, consider the local physical signs, and in the second, the constitutional state. Among many descriptions drawn from life of the physical signs of fibroid lung I possess in particular two, one of which was written in conjunction with Dr. Pollock in 1868, and one with Dr. Douglas Powell in 1885. As concrete examples will strengthen the general description, and as the authority of those justly distinguished physicians will stamp with accuracy the relation of the physical signs in the cases examined, I herewith reproduce them

Dr. Pollock's case, examined with Dr. Andrew Clark, October 21st, 1868.—A farm labourer, well nourished, rosy, and of healthy aspect, fifty-seven years of age, and of regular and temperate habits, complains of occasional cough, slight morning expectoration, and breathlessness on exertion. His father died at sixty from renal disease; his mother, aged eighty-six, is alive and well; two sisters are living and in good health; two brothers and sisters died from causes unknown. In 1860 the patient had trouble, presumed to be pleuritic, in his left side, and after some weeks got well. In February, 1868, eight months before this examination, the patient caught cold, shivered, felt sharp pain in the left side, became feverish, had a little cough, and was confined to bed; had night sweats some time in March; in April or May was well. The digestive organs are in fair condition; the urine is abundant, sedimentary, of low density, and contains a considerable amount of albumen. The left side of the chest is flattened from the clavicle to near the nipple, in the lower part of the axillary region, and about the posterior base. The impulse of the heart is felt immediately under the left nipple, and its action, unaccompanied by murmurs, is normal; the pulse is about 80.

Examination of left side.—Above the clavicle the percussion note is normal; from second rib to anterior base, except near the sternum, there is absolute dulness, which nowhere passes the median line. In the lower half of the axillary region, and posteriorly from the spine of the scapula to the base of the lung, there is marked and increasing dulness; in front, from summit to nipple, in the upper half of the axillary region, and posteriorly in the supra-spinous fossa, and for a little way below the spine of the scapula, the tactile vocal fremitus is increased; elsewhere it is in different degrees at different parts demolished. Upon auscultation the following signs are elicited. In the supra-clavicular region there is normal vesicular breathing, but an occasional wheeze is heard at the close of inspiration, and the expiration is prolonged. From the clavicle to the second rib the inspiration is rustling; the expiration prolonged and blowing. Between the second rib and the nipple the respiration is bronchial and the vocal resonance is altered and increased. From the nipple to the anterior base the respiratory sounds and the vocal resonance are suppressed; only a faint creaking, crackling, or rumbling is heard. In the upper part of the axilla there are heard pleural creaking, bronchial breathing, and a modified bronchophony; in the lower part all sounds are suppressed. In the supra-spinous fossa the respiratory sounds are loud, harsh, and accompanied by crepitation, which, on coughing, becomes a crackle. There is no increase of vocal resonance. From the spine of the scapula, where they are weak and hollow, the respiratory sounds become fainter towards the base, and are there wholly suppressed. In no part of the right lung can any sign of disease be discovered. In 1878 the patient was reported to be in the same condition; but since then he has not been seen.

Dr. Douglas Powell's case, examined with Sir Andrew Clark on Jan. 7th, 1885.—The patient is a dark, stout, florid, healthy-looking man of fifty-four, and has no complaint except that he is breathless on exertion, and that he gets a little cough and expectoration in cold and damp weather. He has been slowly gaining flesh and strength for the last six years. In 1863 or 1864 patient had some serious trouble in his left side, and was ill for seven weeks. In 1866 he had a fresh illness with pains in his left side, and "a feeling as if there were two holes in his lung when he took deep breaths." Was first seen in November, 1867, by Dr. Andrew Clark, who reported the case to be one of chronic dry pleurisy, with secondary fibroid induration of the lung. About this time he was for six months an inmate of the Brompton Hospital, where he was repeatedly examined by Dr. Douglas Powell. The left side of the thorax is flattened and irregularly retracted, rises imperfectly and unequally on inspiration, and measures on the level of the nipple sixteen inches and a half, being one inch and a half less than the measurement of the opposite side at the same place. The left shoulder is depressed and angular; the left nipple corresponds to the fifth rib. The lower part of the axillary region is protuberant, and the upper retracted. The inferior angle of the scapula juts outwards from the ribs. The impulse of the heart is felt under the left nipple, and its action is slow and normal; the pulse is full, soft, and compressible. The percussion note, slightly tubular in the supra-clavicular space, and normal just below the clavicle, becomes increasingly dull to the base, where the dulness is absolute. In the axillary region there is dulness throughout, slight above, moderate in the middle, absolute at the base. Posteriorly dulness begins below the spine of the scapula, and increases to the base. The tactile vocal fremitus, normal at the summit and increased at the middle of the axillary region, is everywhere else either greatly diminished or entirely suppressed. About the summit of the lung the respiratory sounds are harsh, but of the vesicular type, and the expiration is prolonged; there are, however, no râles. About the middle of the axilla there are heard superficial creaking or rubbing, with occasional coarse crepitation and dry rhonchi, elsewhere the respiratory sounds are feeble, hollow, distant. The vocal resonance, loud in the supra-clavicular region and just below the clavicle, is bronchophonic in the middle and upper part of the axilla; at the base it is suppressed, and in other parts diminished. The right side of the thorax, full and rounded, rises fully on inspiration, and yields to examination no evidence of disease. The digestive organs are in excellent order. The urine, with less than an average discharge, has a specific gravity of 1014, is acid, clear, and contains no trace of albumen or of sugar.[3]

From these two cases, average specimens of their class, a tolerably complete account may be obtained of the physical signs characteristic of the fibroid lung, and from the records of Dr. Douglas Powell's case one will now see how one may reasonably demur to the propriety of designating by the term chronic interstitial pneumonia a state of lung which has been quiescent for years, develops no general symptoms, and is compatible with more than average health. In these circumstances the terms sclerosis or fibroid ought, I think, to be preferred, inasmuch as they indicate with sufficient accuracy the physical characters of the pathological change, involve no hypothesis, and may, whilst hypotheses change, remain unchanged.

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[3] Since the delivery of this lecture Dr. Douglas Powell has reminded me that on more than one occasion the urine of this patient has been slightly albuminous.

The local physical signs of pulmonary fibroid induration of moderate extent may be now formally enumerated, and they are as follows. The disease is commonly unilateral; the affected side is irregularly flattened or retracted; the shoulder is depressed, the lower angle of the scapula is tilted outwards, the spine is sometimes a little twisted, and the respiratory movements, especially the movement of expansion, are defective and irregular. The tactile vocal fremitus is diminished; there is more or less dulness on percussion; pleural rustlings, crepitations, cracklings, creakings or frictions are always at some time audible; the respiratory sounds are usually feeble, hollow, distant; from time to time there are crepitations which are often of a metallic quality, with moist or dry mucous rhonchi.

Such are the physical signs in favourable cases ,of fibroid lung, where the elasticity of the parenchyma is but moderately diminished and its nutritive conditions are not seriously disturbed. When, however, the base of the lung, surrounded and invaded by indurated lymph, has lost a great part of its elasticity, and the bronchial mucosa, stimulated by undue supplies of altered blood, secretes a more or less viscid mucus which cannot be expelled, bubbling rhonchi of metallic quality are heard in the affected region, and there arise recurring paroxysms of cough, which succeed, only by the help of retching, in emptying the bronchial tubes. Although this condition invades the comfort of the patient, it does not, unless greatly aggravated, seriously injure the health or obviously limit the duration of life. But when the lung becomes more and more rigid, and the bronchial tubes fill more easily with secretion, which is with increasing difficulty expectorated, the patient begins to suffer, and through secondary congestions, consolidations, emphysemas, and perhaps bronchial dilatations, both health and life are placed in peril. The constitutional symptoms accompanying fibroid lung vary according to the state of the induration. When this is not advanced enough to destroy the pulmonary elasticity, when the bronchial secretion is not in excess of what can be easily expectorated, and when the patient is kept under favourable physiological conditions, the general health is little if at all affected. It is true that he becomes breathless on exertion, that his general power of resistance to disturbing causes is lowered, and that from small provocation he falls into bronchial gastric or vesical catarrhs. Nevertheless, with just guidance and loyal obedience to it the patient may continue beyond the average duration of life to live and work. On the other hand, when the induration has destroyed the elasticity of the pulmonary parenchyma and the bronchi are filled for hours with sputa, which cannot be discharged, and perhaps undergo septic change, the constitution suffers; sometimes there is gastric, hepatic, and enteric catarrh; sometimes the urine falls in density and becomes more decidedly albuminous; sometimes the face and neck become swollen and the veins of the affected side enlarged; sometimes the feet become œdematous; and always, even with increased frequency of pulse, the temperature falls below the normal standard. But even in these conditions, with his comfort invaded and his capacity for work narrowed, the patient may return to the favourable stage of his malady, or without doing so may reach the longest term of life. The albuminous urine existing in the great majority of cases of fibroid lung seems to be of small importance in its earlier stages. But in its later and more unfavourable stages, when the bronchi are almost always loaded, and the lung becomes increasingly hard and congested, and the circulation is hurried and feeble, and the skin cold and harsh and dry, the condition of the kidneys becomes greatly aggravated, and at last puts an end to life. Indeed, in the greater number of cases, it is the renal and not the pulmonary affection which puts an end to life.

Proceeding now to the bronchiectatic lung state, I have to observe that its clinical characters have been elsewhere so admirably and exhaustively described that I do not feel justified in occupying the time of the College by giving another description, which I could not execute so well, and to which I could add so little. Nevertheless, I desire to notice some points in the clinical history of bronchiectasis, either because they have not been dwelt upon before, or because they have been inadequately or erroneously described. In the first place, the general condition of the bronchiectatic patient differs materially from the subject of tubercular phthisis on the one hand, and of fibroid lung on the other. Pale or cyanosed, for the most part thin and stooping, distressed by paroxysms of cough and drained by discharges of purulent and sometimes fetid expectoration, the subject of bronchiectasis displays a combination of mental and bodily engergy not to be met with in any other disease. In the second place, whilst in fibroid lung the disease is for the most part unilateral and in tuberculosis bilateral, in bronchiectasis both forms occur in nearly equal numbers. In the third place, whilst bronchiectasis resembles fibroid (for which it could not well be mistaken) in temperature, circulation, forms of cough, kinds of expectoration, conditions of breathing, absence of malaise, and slowness of general progress, it differs in almost all these points from tubercular phthisis, with which it is frequently confused and has nevertheless little in common. In the fourth place, whilst the excavations of fibroid occur at any part of the lung and the excavations of tubercular disease at its summit, and whilst the excavations of both, when they are multiple, appear in groups without definite form or order, the dilatations of bronchial tubes, found more frequently at first in the middle and lower than in the upper lobes, are arranged in order along the bronchial ramifications. In the fifth place, whilst the excavations of fibroid and tubercular disease arise in the midst of consolidations, the bronchial dilatations have no necessary relations to them, and, although commonly surrounded by fibroid induration, may be often found in the midst of apparently unaltered lung. In the sixth place, although bronchial dilatations may be unsurrounded by peribronchial thickenings, or by pulmonary induration, chronic pleuritic neoplastic membranes are never absent. In the seventh place, when several cylindrically dilated bronchi lie near to each other, the physical signs are sometimes such as to suggest the existence of a large cavity with rigid walls; but a careful and often repeated study of those signs will prove that they vary with the amount and time of the expectoration, and that sometimes the signs of a cavity are often wanting, and that at other times they are present only in isolated parts. In the eighth place, in opposition to Traube and others, I contend that the sputum in bronchiectasis, similar in characters to that of advanced and regressive fibroid, frequently contains fragments of elastic tissue in two forms: first, in the form of bands, consisting of fibres running in straight lines parallel to each other; and, secondly, in the form of elastic areolæ and thickened intersecting trabeculæ. The former are exfoliated from the bronchial mucosa; the latter come from the pulmonary alveoli disintegrated by ulceration proceeding outwards from the bronchial dilatations. In the ninth place, the sputum in uncomplicated cases of bronchiectasis, accompanied or unaccompanied by fibroid indurations and excavations, does not, as far as my present experience extends, contain tubercular bacilli. In the tenth place, the only certain means of distinguishing a tubercular from a bronchiectatic cavity, or of knowing when a tubercular has supervened upon a fibroid or bronchiectatic process, is the presence in the sputum of tubercular bacilli.

Leaving now the bronchietatic lung state, I proceed to consider the chief points in the clinical history of the phthisical fibroid lung. As before, I will discuss, first, the local and physical signs, and thereafter, the constitutional or general symptoms. The physical signs of the phthisical fibroid lung are the same as those of the simple fibroid lung, with certain alterations and additions. The disease is for the most part unilateral; and when we inspect the chest, we observe the same flattening or retraction of the affected side, the same depression of the shoulder and nipple, the same leaning of the body to the affected side, the same approximation of the ribs and hollowing of the intercostal spaces, the same displacement of the cardiac impulse and throbbing at the root of the pulmonary artery,[4] the same projection of the lower angle of the scapula and twisting of the spine, the same restricted movements of inspiration, and the same rounded fulness and compensatory expansion of the unaffected side. By palpation and percussion we elicit results resembling those elicited by examination of the fibroid lung: diminution in varying degrees of tactile vocal fremitus, sometimes friction fremitus, and dulness on percussion, seldom over the upper, usually over the lower lobes, and most frequently at the posterior base. Upon auscultation we hear over the summit a harsh and jerking respiratory murmur, prolonged expiration, perhaps some medium crepitation or dry rhonchus, and increased vocal resonance. Over the dull regions there will be heard feeble breath sounds, coarse crepitations, and bubbling rhonchi, usually metallic in character; at some parts the vocal resonance will be diminished, and at others increased. At one or two spots in the base or middle of the lung, very rarely at its summit, there will be found a tubular percussion note, increased fremitus, cavernous breathing, bubbling or smaller gurgling râles, and piercing bronchophonic voice resonance. Throughout the lung opposite the affected one the respiratory murmur, penetrating everywhere, will be found loud, harsh, and accompanied by a few rhonchi or by scattered moist crepitations, which come and go. The patient has paroxysms of cough, making the face swollen and livid, and ending sometimes in dry retching, sometimes in the expulsion of several ounces of expectoration. This expectoration, sometimes gelatinous or muco-purulent, sometimes in discrete opaque masses like softened cheese, sometimes watery, sanguinolent, or fetid, contains in a mucoid or granular matrix pus-globules, granule-cells, blood-discs, epithelial cells, bands and areolæ of elastic tissue, and the débris of decaying structures swarming with micrococci. The breathing, quiet when at rest, becomes, on moving about or on coughing, shallow, laboured, and quick. The heart, drawn to the affected side, may be acting vigorously and with moderate frequency; there will be probably a systolic bruit in the pulmonary area; the pulse will be of moderate volume, and the superficial cervical veins will be distended. If the disease is much advanced, the face and neck will be swollen, and the integument over the side of the affected lung may become œdematous; the pulse will increase in frequency and diminish in volume, and the extremities will become cold and damp. The digestive organs are more or less deranged through hepatic and gastro-enteric catarrh; the liver is enlarged, there are often hæmorrhoids, and the bowels are confined. Almost invariably the urine falls in density and contains albumen; and this condition of the renal secretion is one of the features which, with others to be mentioned, make so striking the difference between fibroid and tubercular phthisis. The patient is often fairly nourished, sometimes corpulent, and, unless there is much bronchiectatic disease, seldom thin. In a few cases he becomes cachectic-looking and anasarcous. The nervous system, except towards the close of the disease, is seldom seriously disturbed. Only one symptom occurs sufficiently often to be regarded as characteristic; this is pain about the base of the affected lung. Present in many cases, sometimes slight, sometimes severe, occasionally occurring in paroxysms which play around the attachments of the diaphragm and pass downwards into the abdominal walls, this pain, regarded as a neuralgia, is considered by the patient to be the essential part of his malady, and causes him, in fact, his chief if not sole complaint.

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[4] This throbbing at the root of the pulmonary artery is sometimes mistaken for the systolic impulse of the left auricle.

With such serious signs of disease, and with such an assemblage of symptoms depending thereon, it might well be thought that the patient was in constant suffering and in imminent peril; and yet, strange to say, it is sometimes quite otherwise. The symptoms which seem the most distressing cause him either little suffering or suffering which is immediately forgotten; and soon after a paroxysm of coughing, in which death from mechanical violence or suffocation or exhaustion seems inevitable, the patient may be found full of business, sparkling with humour, and confident of life. Here is another of those features of fibroid which serve to distinguish it from tubercular phthisis: the frequent concurrence of extensive disease with an abounding vivacity and abiding life. For although often it seems as if the patient must succumb, yet as often he rallies, and, renewing his conflicts and repeating his victories, he continues in the fervour of self-reliant hope to live and fight and to enjoy work.

Here, then, is the eventual outcome of a primitive dry pleurisy, which, after lasting for an uncertain time, has invaded the lung, altered or destroyed some of its structural constituents, consolidated portions of its parenchyma, and brought about ulcerous excavations therein. Here are well-defined pathological, corresponding with well-defined clinical, conditions moving forward together with constantly re-adjusted relations towards a definite issue. Here are an assemblange and progression of symptoms associated with or dependent upon an ulcerative destruction of more or less circumscribed non-malignant deposits in the lung. What is the name whereby we make known to each other the existence of this complex state? We call it *pulmonary phthisis*, and the term has so penetrated every department of thought and work in medicine that it can no more be rooted out. This final outcome of pulmonary fibroid invasion is therefore a pulmonary phthisis. And if nothing more could be said, here at last would be an end of the whole matter. But, for my own part, I believe that on this subject there is more to be said; and to those who have sufficient experience and settled convictions I regard it as a duty to say it. Such saying may clash with established opinion, assume the aspect of a retrograde movement, and be even inaccurate. Nevertheless, it ought to be welcomed; for genuine thought born of genuine work must always in science have its place and use. What, then, if under the term pulmonary phthisis there are included several states, which, although corresponding to the generic definition, are different in their characters, course, duration, and issues? If they exist, ought not such states to be named, and so named that the ideas which they express, and the distinctions which they embody, shall be preserved for future study and use? It cannot be a worthless knowledge which will enable one in a given case to predict with accuracy its future course, and say whether the subject of it is to live for five or for fifty years. And, furthermore, if such states have vindicated their right to be named, upon what principles shall the names be bestowed? Surely, if we wish to avoid confusion of thought and speech, surely if we wish to repress that needless ever-changing nomenclature, that substitution of words for ideas, that reproduction of old thoughts disguised under freshly furbished raiment, which in knowledge so often begets movement without progress, we shall make sure that the name given shall be based on some physical characteristic of the thing named; so that *whilst theories of its nature may change, the name bestowed* upon it, and by which it becomes everywhere and by everyone understood, shall remain unchanged.

Now, my contention is that our answers to all these questions should be in the affirmative. I contend that there is a general assemblage of pathological conditions upon which we may bestow the generic term phthisis; that included in this term are subsidiary groups of states, which, differing each from the other in some essential points of their pathological and clinical history, demand separate recognition; and that, in naming them, we should have exclusive regard not to the ephemeral theories of their nature, but to the abiding facts of their physical constitution. Guided by these considerations, I regard the ultimate condition of the lung invaded, altered, consolidated, and excavated by fibroid material as a phthisis; and seeing that the most obvious and unvarying fact in its physical constitution is the presence and action of this very fibroid substance, I am bold enough to call it fibroid phthisis. This boldness will doubtless call down upon me a storm of reprobation and denial; be it so. Confident that there is at least some just foundation for the position which I have taken, I must be content to endure and wait. In reply to this contention it will be said that the subject is no longer open to discussion; that experimental, pathological, and clinical inquiries concur to prove that there is but one phthisis, the sole originator of which is the tubercular bacillus; that there is neither room nor need for subsidiary classifications; and that their advocacy can be accounted for only by the ignorance or incompetence of the advocates. But these arguments, couched in such courtesies of modern controversy, are not so conclusive as they sound and seem. Many answers may be made to them, but on the present occasion I shall confine myself to two, which, as I venture to think, are neither light nor irrelevant.

In the first place, assuming the absolute unity of phthisis under the exclusive causation of the tubercular bacillus, this unity does not do away with the fact that there are included in it subsidiary groups which, for reasons already given and not refuted by the bacillary presence, require separate and permanent recognition. At present the bacillary hypothesis, although supreme in the domain of pathology, continues to be of but small account or even barren in the field of practical medicine. We cannot prevent the entrance of the bacillus into the organism; we cannot follow it into the secret places where it dwells and works; we cannot reach it by drugs, nor put an end to its multiplication by taking refuge among the mountain tops. But although we cannot eradicate the bacillus nor arrest its action upon the organism, we may perhaps succeed in helping the tissues to resist more or less successfully the attacks which it makes upon them and the destruction which follows in their wake. And, although in addressing ourselves to the furtherance of this object, we must have regard in the first place to the general well-being of the organism, we must not be unmindful of the different structural effects which arise from the unitary action of the bacillus. We must remember that sometimes these structural effects appear under the form of tubercles, sometimes under the form of caseous masses, sometimes under the form of fibroid consolidations, and sometimes as combinations of these forms, in which, however, one form is always predominant. Now, it can scarcely be denied that there is some difference of meaning in these differences of structural effects; that they pursue different courses; and that they react in different ways to the influences of climate, food, alcohol, and drugs. And if this be so, I can discover no valid reason why those different groups should not be recognised by distinctive names, nor can I understand how we are to preserve a complete loyalty to the uses of knowledge if we continue to refuse them recognition. It can be no invasion of the rights and privileges of the bacillary suzerainty to grant subordinate autonomies to the several groups of states which, arising under its influence and continuing through its presence, pursue independent courses and create widely different histories. Why under the generic name bacillary phthisis should we not recognise the subordinate independence of tubercular bacillary phthisis, caseous bacillary phthisis, and fibroid bacillary phthisis? Surely every just differentiation is a substantial gain, and every confounding of things fructively distinct a material loss. In the second place, I hold that the assertion that all ulcerations of non-malignant deposits in the lungs are bacillary remains unproved, and is opposed to the results of inquiries made by several competent observers. I contend, on the contrary, that there exist cases of ulcerative bronchiectasis and of fibroid lung with excavations in which, after repeated search by processes successful in veritable tuberculosis, no tubercular bacilli could be found. It is to such cases that I give the name of non-bacillary fibroid phthisis.

It may now be justly asked, Would anything be gained by establishing this distinction? I think much in many ways. It is, however, of the clinical gain alone that I shall at present speak. By adopting and carefully studying the proposed distinction, we should learn that the history of non-bacillary fibroid phthisis is quite different from that of bacillary tubercular phthisis, and that the treatment which would prove useful in the one might prove both useless and injurious in the other; for example, alcohol which is usually helpful in caseous, is usually hurtful in fibroid phthisis. If anyone will critically compare the broad facts making up the history of tubercular with those making up that of fibroid phthisis, I think he will become disposed to admit that the distinction now contended for is both real and considerable.

Let me bring to your remembrance a very few of the contrasting facts which are found in the two forms of phthisis now under consideration.[3] Tubercular phthisis is primarily of constitutional origin, and appears for the most part in the young; it is bilateral; its course is accompanied by elevation of temperature and rapidity of circulation, by progressive loss of flesh, strength, and colour, sometimes by laryngeal ulceration, and sometimes by sensations of painful exhaustion and malaise; it is usually rapid in its progress; the majority die within three years; and the few who, in consequence of fibroid complications, live for several years, enlarge the average duration of the disease to four or five. On the other hand, fibroid phthisis is usually of local origin, and appears for the most part in the middle-aged; it is in the main unilateral; it is unaccompanied by elevation of temperature or hurry of circulation; flesh, colour, and strength may remain but slightly affected for years; it is not incompatible with great bodily and mental energy; the urine almost always contains a little albumen; the progress of the malady is slow; œdema is never absent throughout; and death, which seldom occurs within five years, often lasts for thirty.

Here I must bring these lectures to an end. Acutely sensible of their shortcomings, I regret that they have not been worthier of the occasion, of the place, and of you. Nevertheless, I take courage of heart in the thought that those who have worked the most, and thought the deepest, and can judge the best will not be ready to forget, or to despise when remembered, the small but sometimes perfect uses of imperfect work.

ON THE
THERAPEUTIC VALUE OF ARSENIC IN ANÆMIA AND ATROPHIC CONDITIONS.

BY SAMUEL WILKS, M.D., LL.D., F.R.S.

ALTHOUGH the value of arsenic in many diseases is well known, yet I believe the extent of its efficiency has by no means spread through the profession at large, judging from the frequent scepticism one meets with when its use is suggested. I should therefore wish, as briefly as possible, to state my experience of the great value of this most remarkable remedy during many years of practice. It has been best known as a medicine in skin diseases, but this only of late years, for Addison, who followed directly in the school of Willan and Bateman, rarely ordered it. Next to its use in cutaneous affections has been its administration in neuralgic affections and ague; after that in special cases of various kinds. More recently the great value of arsenic has been recognised in anæmia; but it is not widely known, I believe, as being equally efficacious in various forms of cachexia, of which I am about to speak.

When a remedy acts—to adopt the expression of the older schools—as an alterative, by modifying nutrition in some unknown way, a question arises which is quite open to consideration: whether those diseases which succumb to its action may not depend upon the same cause; whether, indeed, they are not bound together by some common origin. Be this as it may, there can be no doubt that many of the cutaneous affections cured by arsenic have a gouty origin, and therefore it is not surprising that the same remedy has a great power in preventing attacks of gout. This I have known for many years, and in some cases have by its use undoubtedly kept the attacks in abeyance. Then, this gouty class of persons are often neuralgic, and it may be in them especially that arsenic is the best nervine remedy. I have certainly found it amongst the most efficacious medicines, and in some cases the only remedy. Thus, before the introduction of nitrite of amyl and glonoin for angina pectoris I relied mainly on arsenic, and in some cases kept off attacks for weeks when they had previously occurred almost daily; but this is by no means a novel treatment, for a reference to THE LANCET of May 26th, 1832, will show a letter setting forth the virtues of arsenic in this complaint. In some forms of nervous affection I have found it quite unique in its action. For example, a lady for many years has been the subject of ciliary neuralgia—that is, she has attacks of violent pain in the eyeball accompanied by intense congestion and lacrymation. No ophthalmic surgeon to whom she has applied has afforded her the slightest relief either by medicines or local applications. The only respite she has from her sufferings is during the time she is taking arsenic. How I became acquainted with the use of this remedy in asthma from one of my out-patients I described many years ago.

But the most remarkable effects of this remedy are seen in anæmia and various forms of cachexia and atrophy. My attention was first markedly drawn to it in this connexion owing to the controversy which took place between my late colleague, Dr. Alfred Taylor, and others in reference to the statement published in Johnston's "Chemistry of Common Life" in the year 1855 about the arsenic-eaters in Styria. Young girls were said to add to their charms by using it, acquiring blooming complexions, full rounded forms, and a healthy appearance. Soon afterwards I began to use arsenic in chlorosis with much benefit, but it was not until about ten years afterwards that I had some striking examples of its good effects. If I remember right Dr. Sutton of the London Hospital was then using it in the same class of diseases. The case I especially recollect was a lady about forty years of age, who was pronounced by myself and other physicians to be the subject of idiopathic anæmia, the form of disease subsequently discovered by a German, and styled "pernicious anæmia." Her bloodless and feeble condition compelled her to keep her bed, and it was never believed that she would rise from it again. I suggested arsenic as a possible useful remedy, and she began soon to improve, and in a few weeks was able to come to my house. I saw her some years afterwards, in 1874, when she was quite well. The case is more especially impressed upon my memory on account of the remarks of the husband. When I told him of the remedy which had cured his wife he expressed no surprise, saying it was just the medicine he should have thought of, for if he had a horse which was not "thrifty" he gave it arsenic, rendering it again plump and its skin glossy. Subsequent to this case I have had several of a similar kind, my last one being only a few weeks ago. It was that of a gentleman living at Holloway, and whom I saw with Dr. Blackstone. He had gradually grown anæmic and breathless, so as to be unable to leave his house, and he walked with much difficulty. I called it one of idiopathic anæmia, and feared that he would never recover. He took five drops of liquor arsenicalis, and in a month he was comparatively well. In most of the cases where arsenic has succeeded, iron had previously failed; and it is a question, therefore, whether the latter be of any use in the so-called pernicious anæmia. This, however, does not seem invariably the case unless the diagnosis is at fault. For example, a woman came into the hospital in so bloodless a state that she could not leave her bed, and it was said that iron had been given in vain. An examination of the blood displayed, as was thought, characteristically altered blood-globules, and arsenic was prescribed. After a long course of this medicine she was no better, when iron was ordered for her. She then immediately improved, and left the hospital well.

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[3] That is, there exist in the organism certain peculiarities of soil which enable the bacilli to grow and multiply.

I remember two cases of anæmia with some discolouration of the skin, suggesting the existence of Addison's disease, and which were cured by arsenic. One was a lady whom I saw as long ago as 1869, who had gradually been getting thin, sallow, and bloodless. She was first thought to have liver disease, and then Addison's disease; but of these there was no evidence, and I recommended arsenic. She speedily recovered. The other case was that of a lad who was sent to me from Suffolk by Dr. Manthorp as he was supposed to be the subject of Addison's disease. He was anæmic, sallow, very feeble, and breathless on exertion. Arsenic was given him, and he completely recovered.

It is another class of case, however, which especially prompted me to take up my pen and extol the virtues of arsenic, for although its efficacy is known in anæmia, I do not find that a knowledge of its merits has extended to wasting and general cachexia. It was in the year 1868 that I went to see a lady who was confined to her bed and in an extreme state of emaciation. I found on physical examination nothing tangible except an enlarged spleen. She had been staying at a friend's house in a doubtfully malarious district, and therefore might have been infected by ague poison. Arsenic was given, and she made a rapid and complete recovery. It is well known that in cases of inveterate malarious poisoning arsenic is often the best remedy, but the possible existence of such a cause will not account for the marvellous effects of arsenic in other cases; and I have notes of two patients who lived at Margate, where a miasmatic influence could not be suspected. The first case was that of a lady sent to me by Dr. Thornton. She was much impoverished, and at the same time had loss of appetite and other gastric symptoms, so that I suspected early malignant disease. I could not, however, prove this, and suggested a trial of arsenic. The result is seen in a letter which I received from Dr. Thornton, dated December 1875, in which he says, "I fancy you will be pleased to know that Mrs. B——, for whom you prescribed arsenic, and of whom you took not the most sanguine view, thinking probably that some hidden malignant disease might develop itself, strange to say, is now convalescent—that is, she has recovered her natural complexion, lost all pains and feeling of debility, and, indeed, is as well as she has been for the last few years. I never saw a more unpromising case, and I do not remember ever to have seen anyone improve so steadily as she did under the influence of arsenic (?); at all events, she was very ill, and now she is comparatively well."

The second case from Margate was that of a young man resident in that town, and brought to me by Mr. Dunstan of Tollington-park. He was twenty-one years of age, and had been gradually wasting away for many months until he had become, as his friends said, a perfect skeleton. He certainly was emaciated to a most extreme degree. On examination I failed, like other medical men, to discover any disease, but saying that if the patient had been an infant he would have been called the subject of marasmus. I suggested arsenic as the only likely remedy to do him good if he had no organic disease, and four drops of the solution were prescribed three times a day. He immediately began to recover; in two weeks he had gained five pounds, and in a few more weeks he was perfectly well.

Another case where the remedy was of great service was that of the Rev. Mr. S——. He had been acting as curate both in London and Brighton, but, his health gradually failing, he was obliged to give up his duties. No medical advice was of any value to him, and he was recommended to take a voyage to Australia. He, however, grew worse and worse, and on his arrival at Melbourne he was sent into the hospital. After a while he was again placed on board ship, under the care of a medical man, and sent home to Hampstead. He was carried into the house, being far too weak to walk, and when I saw him I found him as wasted as any living man could be. He was lying on a couch too feeble to rise, and very little more than a skeleton. His weight on leaving the ship was 5 st. 7 lb. With the exception of a cardiac bruit I found no disease, and as he had had every kind of medicine, and every variety of essences of meats and other foods, there seemed little for me to do; but I prescribed arsenic. He slowly began to improve, and in a few weeks he was able to leave his home and visit me. He walked feebly, but his limbs had increased in size, and he weighed 7 st. 10 lb. He then left for the country and the Continent.

I have now mentioned a sufficient number of cases to show the value of an old remedy, and certainly one of the most remarkable in the Pharmacopœia. I would not have it supposed that it cures all cases of anæmia and atrophy, or that it has never failed in my hands; for if I collected all the cases in which I have given it and noted the result, it is probable that the failures might equal the successes. But an explanation will show that a statistical method of arriving at the truth is of no value, seeing that the cases where the remedy was administered were not of a like kind, and that the unsuccessful cases, although resembling in outward appearance those of simple anæmia and atrophy, were in the majority of instances examples of early malignant and other organic disease. The only cases which can be rightly compared are those of a like kind, but the question of its comparative value under the circumstances named cannot affect in any way the undoubted fact of its curing numerous cases of apparently fatal disease. No question can arise as to the efficacy of a medicine when it is prescribed for a person who is weekly and monthly declining in health, and who as rapidly, or more rapidly, regains his health and strength under its use. When this has been observed in a large number of instances, the proof of its value is complete. I have never given very large doses, generally four or five drops of the liquor arsenicalis three times a day, or a little more of the soda preparation. I have never observed any injurious effects from its long use, although, as is known, it becomes absorbed into the system, the urine showing its presence many weeks after its administration has ceased. I will not pretend to say how the remedy acts. Why, when wasting is going on and the blood-corpuscles becoming disintegrated, arsenic should stop the process, and the globules begin to grow, or why it should allow the carbon to be stored up as fat, I do not know. I lay the clinical facts before my readers, and hope that those to whom they are not altogether new will excuse my doing so in the wish to make their knowledge and mine more extended and useful.

Grosvenor-street, W.

BEQUESTS.—The late Miss Duthies of Ruthvieston has, we understand, bequeathed the following among other legacies to public institutions in Aberdeen:—The Royal Infirmary, £2000; the Aberdeen University, for two medical scholarships, £2000; the Hospital for Incurables, £500; the Lying-in Institution, £500; the General Dispensary, £500; the Hospital for Sick Children, £500.

ON A CASE OF OBTURATOR HERNIA.

BY RICKMAN JOHN GODLEE, M.S.,
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CASES of obturator hernia are so uncommon and present such difficulties of diagnosis and treatment, that it may be well to place the following one on record, although strangulation had been in existence for so long that there was little hope of any treatment giving relief, and that adopted did not save the patient.

E. F——, a woman aged forty-five, was admitted under my care into University College Hospital on May 29th, 1884, at 8 P.M. with symptoms of intestinal obstruction. We were unable to obtain any good previous history of the case, and the notes do not mention the length of time from which she had been suffering from symptoms of complete obstruction; but they had been in existence for several days, I think about five, and she had for some time been bringing up fæcal vomit. She was on admission in a state of great collapse, with small pulse, cold extremities, and a marked blue colour of the skin. She complained principally of pain about the region of the umbilicus, or rather above it, and it was only on carefully examining all the hernia regions that it was found that there was distinct tendernees and slight fulness in the left Scarpa's triangle. On questioning her about this point, she allowed that for a long time past she had been subject to pain in this part, which extended down the front of the thigh and which was subject to variations, and was relieved by lying down; but it was evident that occasionally it had caused her considerable inconvenience. The diagnosis apparently lay between some twist or internal strangulation and an obturator hernia (though the possibility of the obstruction depending upon the presence of a tumour was not lost sight of,) and, considering that the former was not improbable, and that if it were the latter it could probably be safely dealt with by abdominal section, I proceeded to operate at 9 P.M. An incision about four inches long was made between the umbilicus and the pubes through the abdominal wall, and a piece of great omentum which lay beneath the incision and which was much matted together was first drawn out of the wound. The index finger of the left hand has then at once passed down to the obturator foramen, and there was no difficulty in detecting the fact that a portion of bowel was tightly strangulated in the upper part of the obturator foramen. It was quite impossible without employing undue force to draw this back, so a blunt-pointed bistoury was carefully passed down along the finger, and by directing the edge inwards the constricting ring was divided and the gut was reduced. The division of the stricture at such a depth from the surface and with the coils of intestine surrounding the finger was a matter of some difficulty, but when it was accomplished the gut was drawn up with ease. It proved to be a part of the small intestine, about two inches long; it was of a bluish colour, but rapidly became red under observation. It was also seen that the previous traction had caused two slight rents in the peritoneal coat, which passed obliquely across the gut, the edges of which were accordingly drawn together with continuous sutures of very fine catgut. The lacerations bled readily. The portion of protruded omentum was then ligatured in two places and removed, the stump being returned, and the abdominal incision was approximated. The patient did not rally after the operation, though she took nourishment, including a good supply of brandy, well. The vomiting stopped, but her extremities remained cold and became more blue, and her skin was bathed in a cold perspiration. Towards the afternoon of the following day an excited delirium set in, and in the evening she died.

The autopsy revealed the fact that the portion of gut which had been constricted was about eighteen feet from the pylorus, and that its mucous membrane was dark and opaque from extravasated blood. There was slight peritonitis around the piece of gut which had been included in the hernia, the coils in this region being adherent to one another and to the pelvic wall by recent lymph. There was also a little reddish fluid in the peritoneal cavity. The hernial sac was of small size, and lay immediately beneath the pectineus muscle. Beyond considerable hypostatic congestion of the lungs, nothing else worthy of note was learnt from the post-mortem examination.

I do not wish to bring this case forward in order to advocate the method of treating obturator hernia by abdominal section in preference to the operation in Scarpa's triangle, though it is probable that the latter is a more difficult procedure. The abdominal section is not an altogether simple matter, and it no doubt involves certain risks which are not encountered in the other operation. It was selected in this case because the symptoms, while obvious enough to direct attention especially to the obturator region, were not thought to be clear enough to negative the possibility of the mischief being found in the locality to which the greater part of the pain had been constantly referred; and it was argued that if the latter had been the case, an abdominal section following the necessarily tedious operation in the thigh would have been a very serious matter in the exhausted condition of the patient. An important lesson to be learnt from the case is the extreme care which should be exercised in making traction on the intestine in a patient whose tissues, as they were in this case, are all in a very flabby and easily lacerable condition.

Wimpole-street, W.

WHAT IS THE EXPLANATION OF ACQUIRED IMMUNITY FROM INFECTIOUS DISEASES?

BY GEORGE M. STERNBERG, M.D.,
MAJOR AND SURGEON, U.S.A.

IT is well known that in the specific infectious diseases of man and of the lower animals a single attack commonly confers immunity from subsequent attacks. There are, however, numerous exceptions to this rule, and the immunity conferred is not absolute, but has a variable value, which depends partly upon individual susceptibility, partly upon the physical vigour of the individual when subsequently exposed, and partly upon circumstances relating to the nature of the exposure—e.g., concentration of poison, mode of infection, &c. There is also evidence that in some cases at least the time which has elapsed since a first attack is an important factor in determining immunity when a subsequent exposure occurs. Even in small-pox and in yellow fever, diseases in which a single attack is in most cases protective during the lifetime of the individual, fatal second attacks occasionally occur. Nevertheless the general law of immunity as a result of a single attack is well established for a majority of the acute infectious diseases.

It is evident that the immunity which results from inoculation with an "attenuated virus"—as, for example, in Pasteur's protective inoculations against anthrax, or from vaccination—is of the same nature, and that a satisfactory explanation must include all established facts of this class. Upon taking a broad view of the question, it will be seen that it includes also the facts relating to relative race immunity, such, for example, as the comparative mildness of yellow fever in the negro, the alleged liability of the esquimaux to suffer a fatal attack of small-pox as a result of vaccination (Grawitz), the immunity of Algerian sheep from anthrax, &c.

Naturally this question has attracted the attention of the leading investigators in the field of experimental pathology, for its inherent interest and practical importance are apparent. Three explanations have been offered to account for the phenomena in question, which may be stated as follows:—(1) The "exhaustion theory," advocated by Pasteur, which supposes that some substance present in the body of a susceptible individual up to the time of a first attack, and which is essential for the development of the specific germ of the disease, is exhausted during the attack, and that consequently this particular germ is unable subsequently to multiply in the body of this individual. (2) The "antidote theory" advocated by Klebs and recently supported by Klein.[1] This theory supposes that some chemical substance is produced during the attack which is inimical to the development of the germ, and which, remaining in the body of the animal, prevents its subsequent development. (3) The vital resistance theory, which supposes that immunity is due to an acquired tolerance on the part of the living cellular elements of the body to the poisonous products evolved by disease germs, to which they probably owe their pathogenic power, and a consequent ability to resist invasion by them. According to this view, individual and race differences in susceptibility, as well as the more or less perfect immunity resulting from a single attack of any one of the specific infectious diseases, are phenomena depending upon differences in vital resisting power, either inherited or acquired. The last-mentioned theory is referred to by Klein in his recent work on "Micro-organisms and Disease" in the following language:—"Some observers (Grawitz, &c.) are not satisfied with this theory" [the antidote theory], but assume that, owing to the first attack, the cells of the tissues so change their nature that they become capable of resisting the immigration of a new generation of the same organism. There is absolutely nothing that I know of in favour of such a theory; it is impossible to imagine that the cells of the connective tissues, of the blood, and of other organs, owing to a past attack of scarlatina, become possessed of new functions or of some new power—as, for instance, a greater power of oxidising, or the like."

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[1] Micro-organisms and Disease, Practitioner (London), vol. xxxiii, No. 4, p. 249.

As the present writer is perhaps included in the "&c." ("Grawitz, &c.") of the above quotation, he feels called upon to say something in favour of the theory thus summarily disposed of, which seems to him to be the only one thus far offered which is at all tenable, and which he advocated in an article published in the *American Journal of the Medical Sciences* of April 1st, 1881, which has the precedence over the paper by Grawitz by a few days, the latter having appeared in Virchow's *Archiv* on the 8th of the same month. In order that the two explanations which I reject as untenable may be fairly presented to the readers of the present paper, I shall quote verbatim the arguments advanced in their support by their most prominent advocates.

The first hypothesis (1) is supported by Pasteur in the following language:—"It is the life of a parasite in the interior of the body which produces the malady commonly called 'choléra des poules,' and which causes death. From the moment when this culture (i.e., the multiplication of the parasite) is no longer possible in the fowl, the sickness cannot appear. The fowls are then in the constitutional state of fowls not subject to be attacked by the disease. These last are as if vaccinated from birth for this malady, because the fœtal evolution has not introduced into their bodies the material necessary to support the life of the microbe; or these nutritive materials have disappeared at an early age. Certainly one should not be surprised that there may be constitutions sometimes susceptible and sometimes rebellious to inoculation—that is to say, to the cultivation of a certain virus, when, as I have announced in my first note, one sees a preparation of beer yeast made exactly like one from the muscles of fowls (bouillon) to show itself absolutely unsuited for the cultivation of the parasite of fowl cholera, while it is admirably adapted to the cultivation of a multitude of microscopic species, notably to the bactéride charbonneuse (bacillus anthracis). The explanation to which these facts conduct us, as well of the constitutional resistance of some individuals, as of the immunity produced by protective inoculations, is only natural when we consider that every culture in general modifies the medium in which it is effected; a modification of the soil when it relates to ordinary plants; a modification of plants and animals when it relates to their parasites; a modification of our culture liquids when it relates to 'mucédines,' 'vibrioniens,' or ferments. These modifications are manifested and characterised by the circumstance that new cultivations of the same species in these media become promptly difficult or impossible. If we sow chicken bouillon with the microbe of fowl cholera, and, after three or four days, filter the liquid in order to remove all trace of the microbe, and subsequently sow anew in the filtered liquid this parasite, it will be found quite powerless to resume the most feeble development. The liquid, which is perfectly limpid after being filtered, retains its limpidity indefinitely. How can we fail to believe that by cultivation in the fowl of the attenuated virus we place its body in the state of this filtered liquid, which can no longer cultivate the microbe? The comparison can be pushed still further; for, if we filter the bouillon containing the microbe in full development, not on the fourth day of culture, but on the second, the filtered liquid will still be able to support the development of the microbe, although with less energy than at the outset. We comprehend, then, that after a cultivation of the modified (*atténué*) microbe in the body of the fowl, we may not have removed from all parts of the body the aliment of the microbe. That which remains will permit a new culture, but in a more restricted measure. This is the effect of a first inoculation; subsequent inoculations will remove progressively all the material necessary for the development of the parasite."[2] In commenting upon Pasteur's explanation of acquired immunity in the chapter on "Bacteria in Infectious Diseases" in my recent work I remark:[3] "It is a little surprising that after disproving by the experimental method the hypothesis last mentioned"—viz., the antidote theory adopted by Klein—"which had been proposed by a member of the French Academy in explanation of the phenomenon in question, Pasteur did not, in accordance with his usual custom, attempt to establish his own hypothesis upon a firm foundation by an experiment which at once suggests itself. If a fowl which is protected against cholera, or an animal which is protected against anthrax, owes this protection to the fact that a certain material which is required for the development of the microbe of fowl cholera, or for the anthrax bacillus, has been exhausted in the course of the modified form of the disease to which immunity is due, then the flesh of such an animal made into bouillon should not constitute a proper culture medium for the organisms in question. The writer ventures to predict that the result of such an experiment would not be favourable to Pasteur's hypothesis, and that it will be found that the micrococcus of fowl cholera can be cultivated in bouillon made from the flesh of a protected animal, and that the bacillus of anthrax may multiply freely in the blood, or in an infusion of the flesh, of an animal which, before it was killed for the experiment, possessed immunity against the disease anthrax."[4]

Since the above was written, Salmon in the United States and Klein in England have reported the results of experiments which show that the prediction made was well founded.

Salmon says, in a recent communication to *Science*:[5]—"I trust, however, you will pardon me for calling your attention to the fact that more than two years ago I demonstrated that immunity was only relative, never absolute; that the most susceptible individual possessed a certain degree of immunity which can be accurately measured; and that *all* degrees of immunity may be overcome by a sufficient increase in the dose of virus. The immunity of the animal body, then, in no sense resembles the exhausted cultivation liquid in the flasks of Pasteur and Tyndall, which no increase in the amount of virulent material added can ever induce to support the development of new generations of the microbe, and the honour of demonstrating this radical difference is due to American investigations. I went further than this, however, and showed that this theory of our European friends was absolutely untenable, because broth made with distilled water from the flesh of an animal that had been granted a very complete immunity was just as favourable a medium for the growth of the virus as that made from susceptible animals; and that such virus lost nothing in virulence by being grown in such a medium. I will not trouble you with the theory of immunity which I developed from these experiments. Like other American work, it may have no value; but it may interest you to know that an able German writer, in the last number of Virchow's *Archiv*, has propounded a theory which in its most important points is identical with my own."

In referring to this theory as his own, Salmon seems to have overlooked the fact that I offered the same explanation of acquired immunity in my paper, already referred to, which was published in the *American Journal of the Medical Sciences* for April, 1881.

Klein says, with reference to the exhaustion theory:—"On careful analysis it will be found that it is not capable of explaining the facts of the case. As we mentioned in a former chapter, cattle inoculated with blood of a guinea-pig dead of anthrax become affected with anthrax, which, although not fatal, is nevertheless sometimes very severe. The animal recovers, and is now, for a time at least, secure against a second attack. But there is absolutely no ground for the assumption that if an infusion of the tissues of this animal were made the bacillus anthracis sown in it would not thrive luxuriantly, seeing that bacillus anthracis grows upon almost anything that has a trace of proteids. Similarly, when of the tissues of a guinea-pig, or mouse, or rabbit, dead of anthrax, an infusion is made, and this is used as nourishing material for bacillus anthracis in artificial cultures, it is found that these latter thrive splendidly. There is then no reason whatever for assuming that, after one attack of illness the blood and tissues become an unfavourable soil for a second invasion of the same organism, and that this change is due to the exhaustion of some necessary chemical compound."[6]

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[2] Comptes Rendus, Acad. des Sciences, xc., p. 952.
[3] Bacteria; Wm. Wood & Co., New York, 1884.
[4] Op. cit., p. 248.
[5] Sept. 26th, 1884, p. 303.

In my own paper, heretofore referred to, in the absence of experimental data I argue as follows:—"Let us see where this hypothesis leads us. In the first place, we must have a material of small-pox, and a material of measles, and a material of scarlet fever, &c. Then we must admit that each of these different materials has been formed in the system and stored up for these emergencies,—attacks of the diseases in question,—for we can scarcely conceive that they were all packed away in the germ cell of the mother and the sperm cell of the father of each susceptible individual. If, then, these peculiar materials have been formed and stored up during the development of the individual, how are we to account for the fact that no new production takes place after an attack of any one of the diseases in question? Again, how shall we account for the fact that the amount of material which would nourish the small-pox germ to the extent of producing a case of confluent small-pox may be exhausted by the action of the attenuated virus (germ) introduced by vaccination? Pasteur's comparison of a fowl protected by inoculation with the microbe of fowl cholera with a culture fluid in which the growth of a particular organism has exhausted the pabulum necessary for the development of additional organisms of the same kind does not seem to me to be a just one, as in the latter case we have a limited supply of nutriment, while in the former we have new supplies constantly provided of the material (food) from which the whole body, including the hypothetical substance essential to the development of the disease germ, was built up prior to the attack. Besides this, we have a constant provision for the elimination of effete and useless products. "This hypothesis, then, requires the formation in the human body, and the retention up to a certain time, of a variety of materials, which, so far as we can see, serve no purpose except to nourish the germs of various specific diseases, and which, having served this purpose, are not again formed in the same system, subjected to similar external conditions, and supplied with the same kind of nutriment."

It hardly seems worth while to give further attention to this explanation offered by the great chemist to whom we owe so much, but who, if we may judge from his reasoning in this instance, is not equally great as a physiologist. We proceed, therefore, to consider hypothesis No. 2.

(To be continued.)

REMARKS ON

NINE CASES OF DEATH BY HANGING

(SIX EXECUTIONS AND THREE SUICIDES).

By R. J. KINKEAD, M.D. Dub.,
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It has been my lot to have rather an extensive experience in death by hanging, both by execution and suicide; although the scientific value of such experience has been largely reduced by the want of post-mortem examinations in all the cases save one, yet something may be learned from a report of them. In the case of executions the prison surgeon has no power to make a post-mortem unless ordered by the coroner. On sentence of death being passed, the prisoner is remitted to the local prison whence he came, and given into the custody of the governor. He remains in his custody, subject to the special rules for condemned prisoners, until the day fixed for execution. The death warrant is in the meantime issued to the sheriff, who has charge of everything connected with the execution. He it is who provides the gallows and engages the executioner, who acts as his officer. The sheriff is not bound to engage the public executioner; he can arrange with anyone he likes. In case no executioner can be found the sub-sheriff is bound to act as executioner, and in case he fails or refuses the high sheriff himself must discharge the duty. On the morning fixed for the execution the sub-sheriff comes to the prison, presents the death-warrant to the governor, and demands the body of the condemned, who is handed over to his custody, and by him to the executioner. Thus the condemned passes from the custody of the prison authorities entirely, and neither the governor nor any prison officer can interfere with him any more. They are, however, bound to assist the sheriff in the discharge of his duty; and by Act of Parliament the governor or deputy governor, the chaplain, and medical officer of the prison must be present at the execution, and make certain statutory declarations. But once the body of the criminal has been handed over to the sheriff, he passes completely from under the custody and control of the prison officials. It is necessary that this should be clearly understood, as there is a general impression to the contrary, and if, as sometimes happens, an accident occurs during an execution, the prison officers are supposed to be accountable, and to have an interest in hushing it up. It cannot be too clearly understood that they have nothing whatever to do with an execution beyond assisting the sheriff and acting as witnesses, and that the entire responsibility rests with the sheriff. Under this mistaken idea of the prison officers' duty it has been urged that the post-mortem examination on the body of an executed criminal should not be made by the prison surgeon, but that an independent medical man should be present at the execution, and give evidence at the inquest. I am not aware that there is any law which authorises a prison surgeon to make a post-mortem examination, on either an ordinary prisoner or executed criminal, without the requisite permission either of the relatives in the former case, or of the sheriff in the latter; and I am not certain whether the sheriff, although the legal custodian of the body, can give permission. He is debarred from the power, given to those in custody of a dead body by the Anatomy Act, of giving it for anatomical purposes. Consequently in cases of executions I have been unable to make a post-mortem examination, unless by order of the coroner. The body having passed to the custody of the sheriff I have felt I had no power as a prison officer to interfere with it. In the case of suicides, in addition to the difficulty likely to arise from the necessity of obtaining the permission of the relatives, the prison surgeon is prevented from making a post-mortem examination even at the coroner's bidding by an order from the executive; that in the case of any prisoner dying in prison, the post-mortem examination, if directed by the coroner to be held, shall not be made by the prison surgeon, but by an independent medical man, to be called in by the coroner for that purpose. This raises a question of law. In private practice, if an inquest is necessary, it is inexpedient that the medical attendant should make the post-mortem examination if any possibility of any question concerning the treatment could arise. In the case of a prisoner dying in prison an inquest must be held, and as the question of treatment, both medical and otherwise, necessarily arises, it is obviously expedient, unless the cause of death is very clear and the proof of good treatment convincing, that a post-mortem examination should be made, and that the duty should be discharged by "an independent medical authority." But as matters stand, the medical officer may be placed between the hammer and the anvil. The coroner is not under the authority of the executive. He is an independent judge, and can refuse to receive orders either from the Home Secretary in England or the Lord Lieutenant in Ireland. Suppose he orders the medical officer to make a post-mortem examination: if the surgeon obeys the coroner, he must disobey his superior officers; if he refuses to make the post-mortem examination, the coroner can commit him for contempt of court.

Shortly after the circular was first issued the coroner of the city of Dublin refused to recognise its authority, and directed the medical officer to make a post-mortem examination on the body of a criminal executed for murder. The Royal Commission on Prisons in Ireland has recommended that "governors be requested, whenever an inquest is about to be held, to inquire of the coroner whether a post-mortem examination is to be made, and, if he should reply in the affirmative, to inform him that" the Lord Lieutenant "wishes such examination to be made by a medical practitioner not connected with the prison service." This mode would certainly be an improvement; it would prevent the medical officer being placed in the very awkward predicament of having to choose which authority he should obey: and there are few coroners who would refuse to comply with a request so conveyed. In only one case of the nine I have seen did the coroner deem a post-mortem necessary. Since January, 1880, there have been ten men executed, and three have committed suicide by hanging in Her Majesty's Prison at Galway. I have been present at the execution of six of these men, and saw the bodies of the suicides within a few minutes of their being discovered.

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[6] The Practitioner, London, Oct. 1884, p. 247.

In eight of the executions Marwood was the hangman, and although he discharged his duty with celerity and death was instantaneous, yet it seemed to me that the time must have appeared terribly long to the criminal from the commencement of the preparations until the bolt was drawn. My observations have also convinced me that in no case should one executioner attempt to hang more than one person at a time; for not only is it likely that an accident may result—as actually did happen in one case—and the death of the criminal be prolonged, but the mental strain and agony of the miserable criminal waiting on the drop until the others are prepared must be something awful. To me, standing looking on, the time seemed interminable, although the work was done rapidly and did not occupy more than a minute or two. What must it have been to the unfortunate creature on the brink of eternity! This will be fully understood from a description of the process. The prisoner's arms are pinioned in the condemned cell. A belt is buckled round the waist; to this belt are attached two straps, which, when the belt is in its place, are about an inch or two in front of and above the anterior superior spine of the ilium. The arms are fastened to the side of the belt by these straps, so that the fingers can barely cross in front, and the elbows project somewhat behind. The pinioning being effected, the prisoner is marched to the scaffold and placed on the drop, immediately under the ring in the cross-beam, to which the rope is attached; the legs are then fastened together by means of a strap placed between the knees and the ankles. Next, the noose is placed round the neck, drawn firmly round the throat, and kept in position by a washer or ring. The white cap is then put on, and the executioner, stepping back, pulls the bolt. Now, it is evident that, no matter how dexterous and practised the executioner may be, the strapping the legs, adjusting the rope, and putting on the cap must take time; and if the prisoner is left standing while the same thing is being done to one or two others, his suffering must be very terrible. What it actually is I suppose no one can conceive; but in one case, although a single execution, and done very quickly, the man fainted, and was actually falling sideways when the bolt was drawn.

In Marwood's executions he used the long drop, and placed the knot under the chin. The rope hung down behind the prisoner's back from the ring in the cross-beam, and looped up from below the waist to its attachment under the chin. Thus it will be seen that the length of the drop was something more than the prisoner's height. This arrangement worked well if the prisoner was steady; but if restless, then there was the danger of what actually happened once—of the loop of the rope catching the convict's elbow as the body fell, and so preventing death being instantaneous. The first man I saw hung was executed in Jan. 1880. He was a tall, powerfully-built fellow, and met his death with great fortitude. One hour and a half after the execution, assisted by Dr. Pye, professor of anatomy, I made a post-mortem. Fæces had not been passed, but there had been an emission of seminal fluid. On dissecting the neck, we found most of the tissues torn through, the body of the third cervical vertebra was broken diagonally across and separated for at least two inches and a half to three inches from the remaining portion, the spinal cord was torn through, and in fact the head was retained in connexion with the trunk merely by the skin, which was not even abraded, a few muscular shreds, and the vessels on the right side. The trachea and œsophagus, the carotid artery and jugular vein on the left side, were torn through, and the tissues were emphysematous. On opening the thorax, nothing particularly abnormal was discovered in the lungs; they were slightly congested, but not to a very appreciable extent; the left heart was empty and firmly contracted, but on the right side both auricle and ventricle were full of frothy blood, the air escaping from the ruptured trachea having been evidently sucked down through the jugular vein.

The next execution I witnessed was in January, 1883. The prisoner walked with tolerable firmness to the scaffold, but appeared to faint on it, for just as the bolt was pulled he fell sideways towards the left; the drop too was evidently a very long one, as the loop of the rope was below the level of his knees. To ascertain roughly the lesions producing death did not need a post-mortem, as all the tissues, save about from one and a quarter to two inches of skin on the right side of the neck, were entirely severed. In fact, had it not been for that small portion of skin he would have been completely decapitated. I attribute this result to an excessively long drop, to a thin neck, and to a rotary motion being imparted by the man's fainting, so that the pull on the body falling did not act in the line of the long axis of the neck, but partly laterally. The next two men were executed two days after. The coroner did not deem a post-mortem examination necessary, but, from an external examination, I have no doubt that the bones of the vertebræ were separated in each case. In the first case I have recorded there was actual fracture of the body of the third cervical vertebra; in the second case the separation took place between the bodies of the second and third cervical vertebræ; and, as far as I could judge in the last two, luxation was about the same place; the ends of the bodies of the vertebræ could be distinctly felt separated from each other by at least two inches and a half.

If I recollect rightly, the evidence in the Dublin executions was to the effect that in all cases the vertebral bones were torn apart and the spinal cord severed. In the four cases which occurred while I was absent from Galway no post-mortem was made, but the gentlemen who discharged my duty have informed me that they had no doubt as to separation of the bones in three. In the fourth, the case in which the rope caught under the elbow, the doctor's evidence at the inquest was that there was no dislocation or fracture of the neck, and that death resulted from strangulation.

(To be continued.)

A CASE OF

HIGH AMPUTATION FOR GANGRENE OF THE FOOT; OBSTRUCTION OF THE POPLITEAL ARTERY BY HYDATID CYSTS.

By H. MALLINS, A.B., M.B., M.Ch.

John T——, aged seventy-four, a labourer, always enjoyed good health until about seven years ago, when, owing to some slight injury, an ulcer formed on the anterior aspect of the middle third of the left leg. This ulcer seemed always to have been extremely painful, and for its relief, according to his account, every remedy, orthodox and unorthodox, had been tried without avail. At the end of last summer, the pain having become more severe, owing to a sloughing tendency which the ulcer began to exhibit, he was admitted into the Norwich Hospital, where he remained several weeks. Under the treatment adopted great improvement followed, and at the time of his discharge the ulcer was all but healed. A few weeks later, however, the whole foot of the affected side began to show signs of disease, the ankle became œdematous, and several of the metatarso-phalangeal joints suppurated and discharged. This recrudescence of the disease was attended with great suffering, the climax of which was reached at the beginning of January, when gangrene of the great toe showed itself. Amputation of the limb was now proposed, and, the risks of the operation having been duly explained, eagerly assented to. The operation was performed under chloroform on January 11th, by the method of long anterior and short posterior flaps, the femur being sawn through at the junction of the lower and middle third. On applying the tourniquet no pulsation of the femoral artery could be detected. Subsequently, when the fleshy parts were divided, the artery was found to be completely plugged by a firm clot. The collateral circulation seems to have been pretty well established, as six vessels required ligature. The wound having been well cleansed with dilute carbolic solution, a dressing of plain absorbent wool was applied. Everything proceeded favourably for the first forty-eight hours, when the temperature began to rise. On dressing the wound the anterior flap was found to have commenced to slough. Gangrene of the entire stump rapidly ensued, with a fatal result on the fifth day.

On examining the vessels of the amputated limb, the popliteal artery was observed to be much enlarged, presenting a fusiform dilatation, about an inch wide and four inches in length. In the process of dissection, the swelling having been accidentally pricked with the knife, a white matter, suggestive at first sight of pus, spurted out. On laying the swelling open, however, no pus could be detected. The walls of the artery were found to be thickened, but the main bulk of the dilatation was constituted by its contents, which consisted of a mass of hydatid cysts, varying in size from that of a very small pea to that of a good-sized raisin. Their walls in every case were collapsed. No hooklets could be discovered with the microscope. To clear up any doubt as to their true nature, a few specimens were sent to Dr. T. Spencer Cobbold, who most kindly examined them, and expressed the opinion that "they are unquestionably true hydatids. The ectocyst displays well-marked characteristics appertaining to echinococcus veterinorum."

Remarks.—It was the paper of Mr. J. Hutchinson, read before the Royal Medical and Chirurgical Society on Dec. 11th, 1883, urging the safety and expediency of high amputation in senile gangrene, that led to the undertaking of the operation in the foregoing case. It had been originally intended to amputate at the knee, but the existence of a small purulent depôt close to the popliteal space led to a suspicion of the healthiness of the tissues in its vicinity. One point to which it is desired to call attention is the early sloughing of the anterior flap. The experience of St. George's Hospital is, according to Mr. T. Pickering Pick, decidedly adverse to long anterior flaps, sloughing having taken place sixteen times in twenty-nine cases. The skin of a man aged seventy undergoes a certain amount of atrophy, a process in which its nutrient bloodvessels doubtless share. In the formation of a skin flap numerous vessels going to it must be divided, thus diminishing its vitality. Moreover, it is not improbable that a slight sloughing is quite sufficient to start off the process of gangrene afresh. For the foregoing reasons the method of long anterior flaps would seem to be unadvisable in amputation for senile gangrene. Though hydatids are found in many different situations in the human body, they seem to take up their abode in the bloodvessels but very rarely. In M. Davaine's analysis of 373 cases of hydatids, as given in Dr. T. Spencer Cobbold's work on "Entozoa," two cases occur in which the pulmonary vessels were the site of the cysts. As far as I can ascertain, these are the only cases of the kind hitherto recorded. In conclusion, it may be pointed out that there was very probably some connexion between the chronic ulcer of the leg and the plugging of the popliteal artery; either diminished blood-supply or pressure on the nerve from the bulging of the artery, leading to diminished vitality of the affected part. The constant and very severe pain would indicate the latter as the more probable cause.

Watton, Norfolk.

NEW REMEDY FOR CHOLERA.

By SHAMSUDIN J. SULEMANI, L.M. BOMBAY.

DURING the latter part of the epidemic of cholera, which broke out in July last at Baroda (a town in India), five marked cases of this disease were treated with jadvari khatai, papita, narjili daryai, and cardamom seeds; four of these were cured and one proved fatal. The above-mentioned four drugs were mixed and given in ten-grain doses to adult patients every hour or two, according to the severity of the symptoms; in each case three or four doses were used. The following are the notes of the cases in question:—

CASE 1.—A girl of about twelve was attacked with cholera at 1 A.M., and seen by me at 6 P.M. the same day. Her body was cold, pulse almost imperceptible, eyes sunken, frequent purging, stools watery and copious, and of the colour of rice water. There was suppression of urine of twelve hours' standing. Before I saw her she had been given chlorodyne and stimulants, but without any effect. Three doses of the above medicine were administered to her, the second dose being given one hour after the first, and the third after two hours. Soon after the administration of the first dose purging diminished and the pulse became perceptible; the second dose was followed by marked improvement, and the extremities and the trunk became gradually warm. She voided urine some two hours after the third dose, and was then out of danger.

CASE 2.—An adult male commenced purging and vomiting at 6 A.M., and was treated with chlorodyne and stimulants, but without relief. I saw him at 5 P.M. the same day, and found him much exhausted. His eyes were sunken, extremities cold, and pulse hardly perceptible. Vomiting was incessant, and he could scarcely retain medicine or water, and had cramps. He had not passed urine for about eight hours. Sinapism to the epigastrium did not check vomiting, and so a mixture of equal parts of laudanum and chloroform was sprinkled over a piece of lint, which was applied over the pit of the stomach for about five minutes, though not continuously, and it stopped the vomiting. Immediately after this the medicine above referred to was given, and he gradually improved. It was repeated twice at the interval of two hours, and he passed urine and recovered.

CASE 3.—A woman aged twenty-five began to vomit and purge at 6 P.M., when chlorodyne and some other medicine were administered, by which vomiting was checked, but purging continued unabated. The next morning, at 11 A.M., I was called to see her for the first time. She was not able to speak, but could open her eyes when shouted to. She had not passed urine since the attack commenced. The whole body was cold, and there was no pulse; even the beating of the brachial artery could not be felt. Now and then cold perspiration broke out. Two doses of the above medicine were given, but there was no effect. Subsequently some other treatment was adopted by another medical gentleman, but the patient died at about 5 P.M.

CASES 4 and 5.—The remaining two cases had well-marked symptoms, and showed signs of improvement after the first dose; they were ultimately cured by two subsequent doses in one case, and by three in the other.

I may observe here that in all these five cases no food was allowed while vomiting and purging continued. Sinapism to the epigastrium (for checking vomiting) and friction and warm bottles to the extremities were ordered. As regards the medicinal properties of the above-mentioned drugs, I beg to state that the first three are said to be tonic, and recommended in Makhzanuladviya for cholera; cardamom seeds act simply as carminative. Their botanical names and the natural orders to which they belong are as follows:—

Name of drug.	Botanical name.	Natural order.
Jadvari khatai.	Delphinium denudatum.	Ranunculaceæ.
Papita.	Strychnos ignatii.	Loganiaceæ.
Narjili daryai.	Lodoicea seychellarum.	Palmeæ.
Cardamoms.	Elettaria cardamomum.	Zingiberaceæ.

These drugs are mentioned by Dr. W. Dymock in his "Vegetable Materia Medica." Narjili daryai has a very hard kernel, and requires to be filed before it is finely powdered.

It is obvious that the number of cases in which this new remedy was tried is too small to enable one to judge of its value; however, it deserves a further trial.

Oxford.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. GEORGE'S HOSPITAL.

EIGHT CASES OF FRACTURE OF THE PATELLA, PUT UP IN GUM BANDAGES AS SOON AFTER THE ACCIDENT AS POSSIBLE; REMARKS.

THE following cases illustrate the method of treatment of fracture of the patella as at present practised at one of the large London hospitals. It comprises the essentials of treatment of such fractures—rest, relaxation of the quadriceps extensor of the thigh, and apposition of the fragments by direct pressure. It also permits the patient to get about at an early date after the injury, the fractured ends being still retained in good position, and the knee-joint kept extended by means of the gum bandage. We would also refer to the remarks appended to Mr. Rivington's case, where suppuration followed paracentesis of the joint, in a case of simple fracture of the patella.[1]

For the report of the following cases we are indebted to Mr. Allingham, house-surgeon.

CASE 1. (Under the care of Mr. Holmes.)—Thomas S——, aged thirty-five, carman, was admitted on Sept. 7th with the following history. While walking along the street he slipped off the kerb, and in trying to save himself from falling under his van heard something give way with a snap. Attempting to rise, he was utterly unable to use his left leg, so he was brought to the hospital. On admission the left patella was fractured transversely about its middle, the fragments being separated one inch; there was very little effusion into the knee-joint. It was immediately done up in the following manner. The limb having been thoroughly washed, the fragments were brought together with ordinary strong strapping. The centre of a piece of strapping one inch and a half wide, and long enough to encircle the limb twice, was placed immediately above the upper fragment, and the two ends pulled in the direction downwards and backwards, crossed behind the joint, and brought forward to meet upon the tubercle of the tibia. This tends to bring the upper part of the patella down to the lower. The other fragment was treated in like manner; a similar strip of strapping was placed just below the lower fragment, then crossed behind the joint and made to meet above the patella in front of the thigh. Next, strapping, two inches and a half wide, was placed over the front of the patella, each end drawn forcibly backwards, crossing behind the joint, brought forwards again, so that the ends might stick on the front of the knee. (Great care must be taken that none of the strapping slips in the slightest degree.) The limb was then well starched and covered evenly from the level of the base of the little toe to about two inches below the perineum, with two thicknesses of flannel bandage, and this in a similar manner encircled by a coarse muslin bandage three inches in width, strong thick gum being then spread over this. Two more layers of bandage, alternating with two of gum, having been applied, the splint was completed. During this process—or after the fragments were brought together with strapping—the leg was supported by the heel, nothing being placed under the thigh or knee that might tend to bend the joint in the slightest degree; for it is absolutely necessary that the fracture be not disturbed, and that the gum bandage should dry with the leg in a state of extreme extension. During the drying the leg was raised by a block placed under the heel to prevent the wet bandage sticking to the bed; as soon as the outside dried, the limb was placed in a patella junk. (The outer layer of gum takes about four hours to dry, but two days are required for the splint to become firm and hard.)

Sept. 8th.—Splint is drying fast, being elevated in a patella junk. Patient complains of pain in the knee; the toes are not swollen. Temperature normal; pulse 80; tongue clean and moist. Did not sleep well.

10th.—Still complains of a little pain, but much less than it was. Temperature normal; slept well.

14th.—No pain; got up and walked about the ward with the help of crutches.

21st.—Left hospital, fourteen days after the accident.

The patient returned about the middle of October, the splint being quite comfortable. He was told to come back at the end of three months, when the splint will be removed and a leather knee-cap supplied him.

CASE 2. (Under the care of Mr. Holmes.)—William B——, aged thirty-five, a painter, fell five feet and fractured his patella transversely by indirect violence on October 30th. On admittance, the fragments were separated about one inch. The accident occurring near the hospital, he was seen about ten minutes after, and as there was no effusion, the fractured surfaces were brought together with strapping as described in Case 1, and the limb enveloped in a gum bandage.

Oct. 31st—Had a good deal of pain in the knee, which was much relieved by elevation.

Nov. 1st and 2nd.—Still some pain, but not so severe; temperature remained normal; toes warm and not blue or swollen.

6th.—Patient was up but had not put his foot to the ground.

12th.—He left the hospital, thirteen days after the accident, with orders to return in a month.

Dec. 15th.—The splint becoming loose, it was removed. The fracture was in good condition with a quarter of an inch between the fragments. Another splint was then applied and he was told to come back at the end of January for a knee-cap.

CASE 3. (Under the care of Mr. Rouse.)—Arthur M'——, aged forty-six, was brought to the hospital on May 24th with the following history:—Whilst running he slipped on a stone, and, trying to save himself, felt something give way in his knee. The right patella was found fractured transversely, the fragments separated about an inch and a half to two inches, with some effusion into the knee-joint. As this was not considerable, and as the upper and lower fragments of the patella could be placed in good apposition, the limb was put up immediately in gum bandage as described in Case 1. For a few days he complained of pain in the joint, but as he was able to sleep and eat, and as his temperature remained normal, it was not deemed necessary to remove the splint. The pain in this case was greatly relieved by well elevating the limb. On June 2nd he left his bed and was about the ward, leaving the hospital on June 6th, thirteen days after the accident, with orders to come up to be seen every month. In July he presented himself and urged to have the splint removed, as he felt confident the leg was well. This was done, and the upper and lower fragments were found in very good position, firmly bound together with an interval of one-third of an inch. He was ordered a leather knee-cap.

CASE 4. (Under the care of Mr. Rouse.)—Sarah D——, aged thirty-four, pregnant seven months, was admitted on April 28th. While descending some stairs she caught her foot in the carpet and fell down. The left patella was found fractured transversely; no effusion into the joint, fragments separated about three-quarters of an inch, but easily approximated so as to elicit bony crepitus. The joint was strapped and the gum bandage applied at once. That night, and for the next few days, the patient complained of pain, which was greatly mitigated, as in the former, by elevation of the limb.

On May 6th she was about the ward, and left the hospital on the 8th, ten days after the accident. This patient has not been to the hospital since.

CASE 5. (Under the care of Mr. Pick).—Sarah MacP——, aged sixty, while walking along the street fell and struck her knee against the pavement. She was immediately taken home and fomentations ordered by her medical man. On June 29th, seven days after the accident, she came to the hospital. The left patella was fractured obliquely, the line of fracture running from without upwards and inwards, the fragments separated one inch. There was a large quantity of fluid in the joint, and great bruising extending over the front and sides of the joint, spreading also down the leg. Under these circumstances it was not thought advisable to treat this case as those previously described. So the leg was bandaged, including the knee, with a Martin's bandage, as tightly as the patient could bear it, the leg elevated, and an ice-bag placed over the joint. At night she complained of so much pain as to necessitate loosening the bandage, the ice being continued. This treatment was pursued for six days, when all the excessive fluid was found absorbed, and the fragments could be drawn together; the leg was put up in the usual way. She left the hospital on July 23rd, three weeks after admittance.

At the end of September, three months after the accident, the splint was removed. The fragments were in good position, with about one-third of an inch interval; but, as the bond of union was not strong, she had the splint reapplied for another month before commencing to wear a knee-cap.

CASE 6. (Under the care of Mr. Haward.)—Rose W——, aged thirty-nine, married. Two days before admittance into hospital she fell from some steps, and in trying to save herself injured her right patella.

On admission, Feb. 14th, a transverse fracture was found with one inch interval between the fragments, and no effusion into the joint. The fractured bone being placed in a good position, the leg was enveloped in the gum bandage.

Feb. 15th, 16th, and 17th.—Leg quite comfortable; no pain.

18th.—She got up, leaving the hospital on Feb. 27th, a fortnight after the accident.

May 14th.—The splint was taken off. A firm, strong, fibrous band, uniting the fracture with a quarter of an inch between the fragments, existed. Knee-cap ordered.

CASE 7. (Under the care of Mr. Haward.)—Walter C——, aged thirty-three, carpenter. Slipped, catching his foot in a carpet. In falling he heard his knee-cap break. He could not stand, so was brought to the hospital on Feb. 19th. Right patella was fractured about its middle, with an inch and a half interval. As there was no excess of synovial fluid in the joint, the leg was put up at once.

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[1] THE LANCET, Jan. 24th, p. 154.

Feb. 25th.—Had been up two days, going out on Feb. 27th, eight days after the accident.

On May 19th the gum bandage was removed. Good union and close apposition of the fragments being found, a knee-cap was ordered.

CASE 8. (Under the care of Mr. Haward.)—On March 17th Charles W——, aged thirty-two, drayman, was brought with the following history—viz., that he fell while walking on glazed tiles. On admission the left patella was found fractured, the fragments separated widely, nor could they be seen owing to the amount of fluid in the joint. This evidently was a case for the use of Martin's bandage, applied as in Case 5. After three days of this treatment the fluid was absorbed and the leg encased in gum bandages. The patient got up on March 23rd, and left the hospital on the 25th, eight days after the accident. The splint was taken off on July 2nd, and the fragments were found united by a firm and thick fibrous band, and separated half an inch.

Remarks.—With regard to this method of treatment, there are some points worthy of observation. It is well known that bringing the upper and lower parts of a fractured patella together tends to tilt the fragments so that the posterior edges of the fractured surfaces meet only, leaving an interval between the anterior edges. Now, it is to remedy this displacement that the third piece of strapping is used, the object being to press on both pieces, and so overcome the tendency to tilt. The amount of fluid in the joint is the indication for the method of treatment to be adopted. If the effusion is great, a Martin's bandage should be used for the first few days. On the other hand, a fracture accompanied with no increased secretion of synovia should be done up at once, for if left for only three or four hours there is sure to be considerable swelling. Previous to putting the fracture up in gum bandage it should be borne in mind, after the strapping is applied, to cover the limb in a double thickness of flannel bandage; for, as this is slightly elastic, it allows the leg to swell to a limited extent. Care should be taken, when putting on the muslin bandages, not to apply them too tightly, and as soon as the gumming is finished to elevate the limb. For two or three days after completion of the splint special attention should be paid to the temperature; if this remains normal, the tongue moist, and the toes warm, there is no need of alarm if the patient complains of pain; but should, on the other hand, the temperature rise, or the toes become swollen, cold, or blue, the splint must be immediately removed.

In treating these cases in the manner described quite as good results are obtained, with no more danger to limb or life and with the following advantages. The patient is not confined to bed for six weeks or two months, as he is if treated by Malgaigne's hooks or any other form of apparatus generally used, but can, as a rule, after a few days, say fourteen at the most, go home and undertake any light work. By strapping the fractured surfaces together and not interfering with them for three months it must be apparent that there is more probability of obtaining firm and good union than by those methods of treatment where it is necessary that the fracture should be frequently attended to, and the fragments thereby be more often disturbed; and certainly the method described is much less distressing to the patient. Putting up the leg in gum bandages rather than plaster-of-Paris has these advantages—viz., the splint is much stronger, does not bend or crack as plaster is apt to do, and, lastly, it is a much lighter apparatus.

WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

CANCER OF THE RIGHT KIDNEY; CONGENITAL ABSENCE OF THE LEFT; NECROPSY; REMARKS.

(Under the care of Mr. F. E. MANBY.)

FOR the following notes we are indebted to Mr. J. W. Batterham, house surgeon.

George W——, aged forty-eight, a painter, was admitted on December 11th, 1884. The patient was a sallow, delicate-looking man, and suffered from dyspeptic symptoms. He stated that for fifteen years he had experienced pain in the right loin, that eighteen months ago he first noticed blood in his urine, and that five months ago his urine was again bloody, this time for three days, but since then he had had several attacks of hæmaturia at irregular intervals. He had lost flesh considerably during the last eighteen months. On the day of admission the urine contained a large quantity of blood and disorganised clot. No cells likely to be of malignant origin were found on microscopical examination of the urine. On passing a sound into the bladder no stone or tumour could be detected, nor was there any blood in the urine after the sounding. Examination of the abdomen revealed a smooth ovoid elastic tumour in the right lumbar and iliac regions, extending slightly into the umbilical region; its rounded margin could be distinctly felt on three sides, but above it appeared continuous with the liver at the level of the ninth rib. The tumour followed the descent of the liver and diaphragm on deep inspiration, and receded with them during expiration. The manipulation of the tumour was followed by the appearance of a little blood in the urine. The question of operation was entertained, but the patient was unwilling to submit to any operative interference. Meanwhile he caught cold, and died of broncho-pneumonia.

Post-mortem examination showed the right kidney symmetrically enlarged, but presenting several small hemispherical bosses on its surface. It measured six inches by four inches and weighed twenty-five ounces. On section it was found to be infiltrated by a mass of encephaloid cancer. It contained no calculi or other concretions. Though a careful and prolonged search was made, no vestige of the left kidney and ureter could be discovered; nor could any trace of the left renal vessels be found, except a slight dimpling of the inner surface of the aorta at the spot where the renal artery would normally have been given off. On further dissection, it was found that the left vesicula seminalis was also absent, although the vas deferens pursued a perfectly normal course. Both testicles and both adrenal bodies were present and normal in appearance. No other abnormalities than those above described were discovered. There were no secondary deposits of the malignant growth. There were no adhesions between the liver and kidney, nor any apparent deficiency of perinephritic fat by which the mobility of the renal tumour might have been accounted for.

Remarks by MR. MANBY.—The mobility of the tumour was a perplexing element in the diagnosis of the case. Dr. W. Roberts states, with reference to renal cancer that the "fixity of the growth is usually a marked characteristic"; and had there been no hæmaturia, as happens (according to the above authority) in nearly half the cases of cancer of the kidney, the tumour would in all probability have been diagnosed as of hepatic origin. The absence of any other ascertainable cause of hæmaturia, and the appearance of blood in the urine immediately after manipulation of the abdominal growth, indicated, however, the nature of the case. The presence of one kidney only, illustrates one of the dangers of nephrectomy—viz., that of removing an only (or the only serviceable) kidney—an error which should be avoided by the use of Mr. Davy's rectal lever as a diagnostic instrument. By compression per rectum of the ureter of the kidney it is proposed to remove the flow of urine from the other ureter into a previously emptied bladder, as is readily demonstrable. This means of diagnosis has been successfully employed by Mr. Davy and others; and I have satisfied myself, by experiments on the cadaver, that the rectal lever will effectually control the passage of fluid along the ureter.

RUPTURE OF THE LUNG AND (?) RUPTURE OF THE LIVER; RECOVERY; REMARKS.

(Under the care of Mr. KOUGH.)

The notes of this case are also furnished by Mr. Batterham.

Eli T——, aged six years, was admitted on Dec. 21st, 1884, having been run over a few minutes previously by a light waggon, two wheels of which were said by a bystander to have passed over the patient's chest. He was sensible, but pale and collapsed. The pulse was small, quick, 168 per minute; respiration was abdominal, short, shallow, 76 per minute. Two hours after admission, when the effects of the shock were passing off, the following notes were taken. "Pulse 160; respiration 72. The short respiratory movements are restricted to the abdomen and left side of the chest. The little patient lies on his right side, with his thighs flexed on the abdomen, and complains of pain, which he locates when asked by placing his hand just above the umbilicus.

resembled one which he had shown to the Society last year, in which there were bands of fibrous tissue enclosing islets of hepatic tissue; he had detected no parasite in the specimen shown by him.—Dr. Bristowe said that he had at first understood that the swollen yellow portion of the liver was the diseased part, but this appeared not to be the case.—Dr. Carrington, in reply, did not suspect the presence of actinomycosis; he did not think that his specimens altogether resembled those of Dr. Price.

Dr. Charlewood Turner showed a specimen of Rupture of the Thoracic Aorta. It was removed from the body of a man aged sixty-four, a labourer, who was seized with collapse of sudden onset and died from syncope the day afterwards. He had frequently suffered from faintness, dyspnœa, and palpitation. The loose stools contained some blood on the day of his admission to the hospital. At the autopsy the arch of the aorta exhibited an L-shaped rupture; the longitudinal rent was situated on the posterior aspect of the aorta. The recent transverse limb of the L-shaped rent passed round the whole circumference of the aorta. The rent led into the dissecting aneurysm, which had a wall of smooth lining membrane, and lay in the same plane as the recent separation of the coats of the aorta. The aneurysm had ruptured into the pericardial cavity, which contained a black blood-clot and some serous fluid. The aorta was atheromatous, but not in the first part; the left ventricle was hypertrophied, and its cavity nearly empty; the kidneys were granular; the cerebral arteries were atheromatous; the lungs were emphysematous. The day before the man's death it was probable that extravasation into the connective tissue of the mediastinum occurred, and the free extravasation into the pericardium probably accompanied the fatal seizure; these extravasations were due to the sudden giving way of the supporting blood-clot as the result of some sudden alteration in the arterial blood pressure. Dr. Peacock had put on record some cases of rupture of the aorta, some of which were of a T shape. In the present specimen the inner and a few layers of the middle coat were torn through in the lower part of the longitudinal rent, and the middle coat was completely rent in the upper part. A second specimen was shown of perforation of the aorta into the pericardium. The case was that of a woman thirty years of age. The arch of the aorta was extensively diseased, of dull appearance, and, in many places eroded with intervening raised areas—probably in different stages of endarteritis.—Dr. Norman Moore remarked on the presence of the cardiac hypertrophy associated with the condition of the kidneys, and said that in nearly every case of aneurysm of the aorta thus associated he had found that the patient was the subject of gout. In a case of hæmorrhage into the pericardium from rupture of an aortic aneurysm, where the kidneys were diseased, he had found gouty changes in almost all the joints of the body.—Dr. Turner said that he had not examined the joints in his case.—Dr. Norman Moore, in reply to a question from the President, said there were many cases of granular kidney in which no gouty changes existed in the joints.

Dr. Parry Price showed specimens of Bony Deposit in the Testes and Epididymis, which were removed from the body of a man aged from fifty to sixty, who was admitted into the hospital in a comatose condition. There was cirrhosis of the liver and enlarged, slightly granular kidneys, cystitis, and two strictures of the urethra; the hard deposit in the testes and epididymis of both sides consisted of typical bone; no healthy glandular tissue could be seen in the testes or epididymis; the vas deferens was healthy. The symmetrical nature of the deposit was remarked on. The changes were probably the result of an old orchitis, following an urethritis, of which the strictures were evidence. He could find no account of any similar case. No cartilage was present in the specimen.—Mr. Alban Doran asked whether there was any suspicion of the disease being of the character of a dermoid tumour. Dermoid tumours of the testes were very different from those which were found more frequently in the ovary. He did not think the specimens were related to the "dermoid class," and Dr. Parry Price agreed with him.

Dr. Colcott Fox showed a specimen of Primary Sarcoma of the left Suprarenal Capsule, with Thrombosis of the inferior vena cava and right auricle, taken from a child aged two years and a half. There was only a history of phthisis on the mother's side, and a possible history of syphilis in the family. The patient was the fourth child, and had always been very fat; there was a cutaneous eruption at the end of the first year, but no snuffles. When first seen, at the age of two years, she was very rickety and of bloated appearance, with a dusky hue about the cheeks, and remarkably hairy, especially about the genitals. For four months there had been enlargement of the abdomen, with a ravenous appetite and great thirst. There was a great deal of sighing. There was no œdema of the lower limbs, nor any specially enlarged subcutaneous veins. A tumour was felt in the left side of the abdomen, occupying the loin, and evidently not the spleen. The bowels were constipated; the urine was normal. Some days after first being seen she had an attack of vomiting, in which lividity and rapid breathing were observed. A similar seizure occurred later on, and the temperature was found to be 102·6°; there was a rapid feeble pulse, but no cardiac bruit could be detected; after stercoraceous vomiting the patient died. At the post-mortem examination the face and neck were swollen, the lips blue, the vulva and clitoris were much hypertrophied, the liver weighed 38 oz.; there was no clot in the portal vein; some dark grumous fluid escaped on removal of the tumour; the left kidney was healthy, but somewhat distorted in shape. The mesenteric glands were the seat of secondary deposits. There was a completely decolourised clot, filling the inferior vena cava and adherent to its walls, and reached along its whole length; it extended to and almost completely filled the right auricle, and projected through the auriculo-ventricular orifice. The uterus and ovaries were large. The tumour was about the size of a cocoanut, and had flattened the kidney; there were areas of hæmorrhage in it; it was microscopically proved to be a large-celled sarcoma. The sections were made by Mr. John Shaw. Thrombosis of the vena cava had been reported by Dr. Moxon in a case of pyæmia with abscesses in the pelvis. In the eighteenth volume of the Transactions Dr. Greenhow had placed on record the case of a girl, aged twelve years, in whom a suprarenal tumour existed. Merkel had described similar tumours. Dr. S. West and Dr. Dickinson had recorded other cases. In Dr. Dickinson's case the gipsy colour without bronzing, the enormous appetite and the vomiting, and other features closely resembled the case now recorded.—Dr. Bristowe said that he had seen a case of primary "cancer" of both suprarenals in a Chinese youth, and thought it was possible in the light of recent investigation that this might have been one of sarcoma.—Mr. Sutton spoke of a specimen of a tumour replacing the right suprarenal capsule in a marmot; the liver and spleen were the seat of secondary growths. This tumour had the structure of the zona fasciculata of the suprarenal body. He had met with similar tumours in a man. He referred to a paper published by Grawitz in Virchow's *Archiv* on the subject of Supernumerary Suprarenal Capsules; tumours having the structure of the cortex of the adrenal were found beneath the capsule of the kidney, and also about the ovaries in the broad ligament. He considered that in the face of such facts we might have to establish a new variety of tumours to include those he had referred to.—Dr. Dickinson spoke of two cases which had been under his observation. In the first case the voice was very gruff and of a bass tone; the words uttered by the precocious infant were very few, but consisted of expletives used by the lowest classes of society; the other characters had been referred to by Dr. C. Fox. The second case had been in the Hospital for Sick Children, Great Ormond-street, and was that of a female child, aged three years, who had also great development of the external genitals, which were studded with large hairs; there was an abdominal tumour having all the characters of a renal tumour, but the memory of the first case he had seen led him to diagnose tumour of the suprarenal body; the autopsy confirmed the diagnosis. In both the cases the relation of the colon to the tumour was rather different from that which usually obtained in renal tumours, for the tumour appeared to be rather above the level of the ascending colon. He thought that this clinical point might establish a distinction of diagnostic value between renal and suprarenal tumours.

Dr. Norman Moore showed a specimen of Tuberculosis of the Kidneys of the Ox with Bacilli. The kidneys were much enlarged, and one completely changed into a great white mass, with hardly any remains of kidney structure except the external lobulation. One lobe of the other kidney had undergone a similar complete change, and elsewhere it showed numerous white nodules. These, as well as the completely changed kidney, showed abundant groups of bacilli, and the bacilli themselves agreed in form, method of staining, and size with the bacilli of tubercle in man. The

Poupart's ligament, and into which the muscles of the abdominal wall are extensively inserted.

Mr. TAYLOR also exhibited a cast of a foot illustrating recovery after Disease of the Tarsus, in which the mid-tarsal joint had been largely involved. The internal cuneiform bone had been removed during the process of treatment, and the resulting cavity was thoroughly drained by a tube passed through the foot. After this was done the improvement was marked and rapid. The foot had been free from any discharge for nine months, and the patient was beginning to use it again.

Dr. SUCKLING showed a case in which Subcutaneous Nodules around the knee, elbow, and finger-joints were present. The patient, a girl aged nine, had had rheumatic fever six months previously; there was a well-marked double mitral bruit, the nodules seemed to be attached to the periosteum and tendons about the joints, and were painful at times.

Dr. SUCKLING also showed a case of Spinal Meningitis which had left loss of the patellar reflexes. The patient, a man aged forty, after being much exposed to cold and wet weather three months previously, had been seized with pains in the back, aggravated by movement; and hyperæsthesia of the feet which prevented him from walking. There was also loss of control over the bladder, and tenderness on percussion over the lumbar spinous processes. After free counter-irritation in the lumbar region of the spine, all the symptoms disappeared except the loss of the knee-jerks. The case was distinguished from one of locomotor ataxia by the absence of (1) characteristic lightning pains, and (2) of the eye symptoms, also by the rapid onset after exposure.

Dr. BODINGTON read a paper based on a visit to Mons. Voisin's wards at the *Salpêtrière, Paris.*

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society took place on Feb. 12th.

Perihepatitis causing Strictures of Bile and Pancreatic Ducts, and Cystic Enlargement of Pancreas.—Dr. BANHAM exhibited a specimen showing strictures of the cystic and common bile-ducts. The pancreatic duct opened into the diseased portion of the common bile-duct, so that both pancreatic and biliary secretions had been shut off from the duodenum, with the effect of causing considerable cystic enlargement of the pancreas and dilatation of the hepatic ducts. The liver was enlarged and indurated, and there were marked evidences of old attacks of perihepatitis. Notes of the case were given. The chief symptoms had been jaundice and distressing itching of the skin, and rapid emaciation. The morbid conditions were supposed to be due to syphilis.

Charcot's Disease.—Mr. CATKIN showed a case of Charcot's Joint Disease occurring in the practice of Mr. A. Jackson at the Sheffield Infirmary. The patient, a joiner, aged thirty-seven, with a previously healthy history, applied at the infirmary some months ago with a painless swelling of the knee-joint. It was thought to be an uncommon state of things at the time, as moist sounds, &c., were to be heard at the apices of the lungs. It was at first diagnosed as hydrarthosis in a tubercular subject. Afterwards, the state of his pupils attracted attention in the out-patient room, and all the commoner symptoms of locomotor ataxia were discovered. The relaxation of the ligaments of the knees was less marked in the right knee.—Mr. ATKIN considered that this case, as well as the one brought forward by him two years ago, effectually negatived the friction traumatic theory. The joint lesion in the first case came on whilst lying in bed with a "nerve cyclone," and in this one the arthropathy preceded the ataxia.

Thoracic Aneurysm.—Dr. PORTER exhibited a case of Thoracic Aneurysm. The patient was an engineman by occupation, forty-eight years of age; there was no history of syphilis or rheumatism. An interesting circumstance in the case was that fifteen years ago the patient received a severe injury to his head by the fall of a trap-door, and a scarf-pin he wore at the time was driven into his chest for an inch and a half. For the last two or three years he had complained of pain behind the sternum, and attacks of dyspepsia and palpitation, and for two or three months of neuralgic pain down the left arm. The aneurysmal tumour was visible to the left of the sternum in the third or fourth intercostal space, and a loud, rough, double murmur audible over it. There was considerable cardiac hypertrophy and high arterial tension, but there was no inequality in the pulse of the opposite sides, or of the upper and lower limbs. There were no marked signs of nervous engorgement or other pressure symptoms. The patient had a troublesome cough, and the respiratory murmur was deficient on the left side, with some dulness and moist râles at the left base.

Treatment of Phthisis.—Dr. HUNT read a paper on this subject. He agreed that the disease was a modern one; and pointed out that the countries most free from it were the northern and colder regions, and he strongly recommended the selection of such countries for the cure of phthisical patients. Dr. Hunt expressed himself very sceptical on all therapeutics as remedial agents, and strongly repudiated the course of certain authorities in recommending them as cures. He had extensively employed antiseptic inhalations, but without any marked success, and was disposed to rely very little upon their potency. Iodoform was another remedy that had been tried, but the results were not such as to warrant him to recommend it in the disease. Dr. Hunt closed his paper by expressing the opinion that in the future the treatment of phthisis would come more under the domain of surgery than it had ever done in the past.

At the meeting on Feb. 26th the following specimens were shown:—

Enlarged Heads.—Mr. B. WALKER introduced two very interesting cases of enlarged heads. The first was that of a man aged twenty-eight, a hawker, with abnormal development of the left side of the frontal bone. The right side of the head measured 10¾ in., and the left 12¼ in., the enlargement being apparently confined to the frontal bone, and causing a decided projection in that region. The condition was congenital, and he had been compelled always to have hats specially fitted. His memory was stated to be remarkably good, especially as regarded objects, persons and places, figures and forms, which he never forgot. The second case was that of a girl aged twelve, and was probably hydrocephalic. As an infant she suffered a good deal in her head, and was considered to have "water upon the brain." The head measured nearly 24¼ in. in circumference. Her intelligence was not impaired; she was very useful at home, but was not so far advanced in learning as others of her age.

Aneurysm of the Aorta.—Mr. LOCKWOOD showed a specimen of Aneurysm of the Transverse Portion of the Aorta which had burst into the left lung. The specimen was from a man aged about fifty, who was admitted into the public hospital in an unconscious condition, with blood flowing from the mouth. He only lived four minutes after admission.

Genu Valgum: Wedge of Bone removed.—Mr. PYE-SMITH showed a Wedge of Bone which he had removed from the Femur of a man with severe Genu Valgum. The specimen was from the right limb, a similar one from the left having been shown at a previous meeting. The limb first operated on was well, the other was healing.

Fracture of Cervical Vertebra.—Mr. PYE-SMITH also showed part of the Spinal Column of a man aged about forty, exhibiting a Fracture of the *Sixth Cervical Vertebra.* The injury had been received in a fall from a dray whilst the man was intoxicated. There was paraplegia and loss of sensation below the umbilicus, except in the distribution of the ilio-inguinal and ilio-hypogastric nerves. There was good thoracic respiration and no rise of temperature. A bedsore began to form within twenty hours of the injury, and the patient died on the fifth day. At the autopsy the cord was softened and congested opposite the fracture, and there was also a softened and ecchymosed portion, with considerable effusion of blood around it, in the lower dorsal region. This latter lesion seemed to have produced the paraplegia, and the later inflammation higher up the fatal termination.

Aural Polypus.—Mr. SIMEON SNELL exhibited a large Aural Polypus. It was of the fibrous variety, and grew from the wall of the meatus. It was only of interest on account of its unusual size.

Mr. ARTHUR JACKSON read a paper entitled "Changed Aspects of Unchanged Truths: The Use and Abuse of Rest." He endeavoured to show that the great truths of physiological and mechanical rest, as laid down by John Hilton in his never-to-be-forgotten and unrivalled lecture on Rest and Pain, were being lost sight of in the theories of the present day. He urged their application in the treatment of fractures, excisions, osteotomies, and in that of wounds; and the more or less complete reform of our present mode of treatment.

peptonised foods, bile, feeding by the nose or rectum, and forced feeding are all considered under the head of Aids to Digestion. A page is devoted to stimulants to digestion, which include condiments, bitters, tonics, acids, alkalies, and stomachic sedatives. The arrangement of the matter in this section appears to us to be open to criticism. Unless the context be closely kept in view the author might be understood to imply that forced feeding, and feeding by the nose or rectum, were aids to digestion. Again, it is perhaps not strictly correct to regard alkalies and bismuth as stimulants to digestion. These, no doubt, are trivial objections; but we think it would add to the orderly arrangement of the work if slight alterations in this regard were made in future editions. Amongst the best chapters in the book are those on Pneumatics and Topical Pneumatics. The term "pneumatic" in therapeutics is not in very common use; it was employed by Pereira to signify therapeutical agents which influence the functions of respiration and the formation of heat. Speaking of the work as a whole, it must be pronounced as sound and good, though in our opinion somewhat too diffuse. This is, however, partly compensated by the increased readability which it entails. Had the work been more compressed the student of it would have saved time, though possibly have lost pleasure. But the book is written for those—and we suppose there are such—to whom a little leisure is not yet unknown.

INDIAN HEALTH STATISTICS.

No. I.

THE twentieth annual report of the Sanitary Commissioner with the Government of India shows a satisfactory state of the public health during the year 1883. The average strength of the European troops for that period was 55,525, the admissions into hospital from them were in the proportion of 1336, the deaths of 10·83, the invaliding of 32·66, and the mean daily sick of 62·85 per 1000, being all lower than in the preceding year; the death-rate, indeed, is the lowest recorded in the last fourteen years. The sickness and mortality were distributed in the three Presidencies as follows:—

Ratio per 1000 of Strength.

Average strength.	Admitted into hospital.	Died in India.	Invalided to England.	Mean daily sick.
Bengal, 34,079	1453	11·21	30·59	65·9
Madras, 10,493	1013	10·19	32·70	55·6
Bombay, 10,943	1249	10·50	35·03	57·5

The admissions in all the three Presidencies were considerably lower than in 1882, and the deaths also show a reduction, except in Bombay, where there was a fractional increase. The invaliding from Madras and Bombay and the mean sick in Madras were higher than in the preceding year. Bengal still furnishes the highest and Madras the lowest ratios of admissions and deaths, but the reduction in the death-rate has been much greater in Bengal than in the other two Presidencies. Paroxysmal fevers cause about one-third of the admissions into hospital in Bengal and Bombay, but Madras enjoys a comparative exemption from them. In the two former the cases were in the ratio of 434 and 412 per 1000, while in Madras they amounted to 112 only. They are not the cause of much mortality. The disease which gives the highest death-rate in all the Presidencies is enteric fever. The mortality by it in 1883 was 2·52 in Bengal, 2·86 in Madras, and 1·55 in Bombay. For the whole force the admissions were 7·7 and the deaths 2·40 per 1000; consequently 31 per cent. of the cases terminated fatally. Omitting stations where only one case occurred, the proportion of deaths to cases ranged between 8 per cent. at Kurrachee and 66 per cent. at Gwalior Fortress. The influence of age upon the death-rate by enteric fever was shown by the mortality among men under twenty-five being 4·34, from twenty-five to twenty-nine being 1·50, and at thirty and upwards 0·70 per 1000. In like manner, as regards length of residence in India, the death-rate in the first and second years of service was 4·98, third to sixth years 1·55, and seventh to tenth years 0·55 per 1000 living in each period. Of 44 cases at Lucknow, 35 occurred in the Derbyshire regiment, "which arrived in India from Egypt on 24th November, 1882, and which was principally composed of very young soldiers." The months in which enteric fever prevailed most were April to September, the admissions into hospital having been 340, as against 89 in the six months October to March inclusive. "With regard to the etiology of the disease, no positive results of any value were arrived at." At Bangalore there was strong evidence of its connexion with the unsatisfactory nature of the water-supply, but in many of the other stations it could not be traced to any common cause. The European troops were remarkably free from cholera, the admissions having been only 1·4 per 1000 in Bengal, 1·8 in Madras, and 1·4 in Bombay, with the corresponding death-rates of 0·94, 0·95, and 0·82 per 1000. In Bengal the stations affected were Allahabad, Benares, Gwalior Fortress, and Chunar; in Madras, Secunderabad and Kamptee; and in Bombay, Ahmednugger and Deolali. Next in frequency to enteric fever as the cause of death in 1883, apoplexy and sunstroke rank in Bengal and Bombay and hepatitis in Madras; the ratio of the former was 1·32 and 1·10, and of the latter 1·72 per 1000 of the strength.

Venereal diseases have been a cause of much inefficiency in all three Presidencies, the admissions into hospital having been in Bengal 281, in Madras 289, and in Bombay 218 per 1000 of the strength. The cases of primary syphilis returned in each Presidency were 88, 111, and 63 per 1000, and of secondary 25, 22, and 21 per 1000.

The mortality among the women was in the ratio of 21·28, being higher than in the preceding year, but under the average. The most frequent causes of death among them were childbirth and abortion and phthisis. Among the children the death-rate was 46·88, being considerably lower than in the preceding ten years. Diarrhœa, dentition, convulsions, and anæmia were the most fatal diseases.

The average strength of the Native Army of India during the year was 114,830. The admissions into hospital amounted to 923, the deaths from all causes to 14·31, the discharges by invaliding to 28·12, and the constantly sick to 31·3 per 1000 of strength. These ratios are all much below the average; the admissions and mean sick are considerably under, but the deaths 3·43 above, those of the European troops during the same period. The sickness and mortality in the three Presidencies respectively were as follows:—

Ratio per 1000 of Strength.

	Admitted.	Died.	Constantly sick.
Bengal	955	13·98	32·0
Madras	737	13·51	27·5
Bombay	994	14·98	34·7

This table shows the Bombay Presidency to have been the most unfavourable to the health of the native troops. Paroxysmal fevers were the most prevalent diseases in all the Presidencies: but, as was the case with the European troops, gave rise to a considerably lower proportion of admissions in Madras than in the other two Presidencies. The cases of intermittent fever were 398 in Bengal, 389 in Bombay, and 271 in Madras per 1000 of strength. The Native troops continue to show a marked exemption from enteric fever, only eighteen cases and five deaths having been returned from the whole army. Cholera did not prevail to any extent in Bengal or Bombay, but in Madras the admissions amounted to 6·2 and the deaths to 2·92 per 1000 of strength. Its prevalence was confined to Secunderabad, Kamptee and Raipur, Vellore and Trichinopoly, and among troops on the march, and two fatal cases occurred at Toungoo in Burmah. Twenty-five cases and fifteen deaths occurred in the Hyderabad contingent, and of these ten, with three deaths, were in the 2nd infantry at Ellichpur. The most fatal diseases among the Native troops were those of the respiratory system, the deaths by which amounted to 3·20 in Bengal, 4·62 in Bombay, and 1·66 in Madras per 1000 of strength. The prevalence of venereal diseases in the Native army offers a very marked contrast to that in the European force, the admissions having been only 31·6 per 1000, as against 270·3. The usual summary of the sanitary sheets of the Native Corps is given. They indicate a considerable amount of overcrowding and of insufficient ventilation, and there seems at many of the stations abundant room for improvement of the drainage and of the general sanitary arrangements.

The most urgent of these is a shortening of the period during which the protection extended to persons placed in an asylum under "urgency certificates" is to be withheld. Practically there is little fault to find with the safeguards provided for the protection of ordinary cases which, after this Act comes into operation, will be submitted to the supervision of a County Court judge, a stipendiary magistrate, or a justice of the peace; instead of being rushed secretly into an asylum without any sort of check on the *bona fides* of the person making the "order." Henceforth orders will, in the regular way, be made by magistrates only. There is, however, a dangerous loophole left for wrong-doing by the adoption of the method of incarceration by "urgency certificates." In itself, this method, which has been borrowed from the Scotch system, is admirable, and will fulfil many useful purposes; but it would manifestly be destructive of the principle of the measure to permit a weak-minded or eccentric person to be put away in an asylum with a single medical certificate, and left in the midst of lunatics for seven days before a petition were presented to a magistrate. Yet this is the effect of the Bill as printed! Again, a report is to be made to the Commissioners a *month* after the admission of a patient to an asylum. Why a month? If a month, and then so much longer as may suit the convenience of the Commissioners in Lunacy, are allowed to elapse before the lunatic is visited, obviously great harm may be done. The *idea* of the Bill is to provide that in *all* cases of admission to an asylum there shall be a special visit to the new inmate within a reasonable time after his reception. This is an excellent measure, but it is absolutely necessary that the visit should be paid much more promptly than at the end of a month, *plus* so much longer time as may be implied by "as soon as conveniently may be." As the Bill is drawn, it may very well happen that two months or more will elapse before the visit which is to act as a safeguard is paid, and long before that time the new inmate may be hopelessly insane. In the case of a patient admitted on an "urgency certificate," it is, as we have said, imperative that the magistrate should interfere in less than seven days. A very little reflection must suffice to make it plain that the danger of wrong-doing will be rather increased than diminished under the proposed Act, unless the powers given under the urgency clause are very carefully guarded.

Speaking generally, the aims of the Bill are good, and not only well directed, but thoughtfully and carefully carried out. Too much, however, is left to the Commissioners, who are assumed to be immaculate, whereas it should be borne in mind by the Legislature that the need for reform has to a large extent arisen out of the careless and perfunctory manner in which the Commissioners have hitherto discharged their duties. If the Commission had not been largely composed of men trained in the evil ways of the asylum-system, and very little in earnest for the interests of the insane, the laws already in existence would have sufficed for the protection of both the sane and the insane. Laws are made for those who either themselves do amiss, or by their error or apathy allow others to offend against the welfare of society. It is indispensable that the most stringent precautions should be now taken to keep the Commissioners up to their work, and to compel them to discharge the obligations of their office in no perfunctory fashion. Let those who doubt this only reflect on the way in which the provision for the scrutiny of certificates by the Commissioners has been carried out. As a matter of fact, it has been the boast of the Chairman of the Commission that extremely few certificates have been found to be defective. What does this mean? Simply and plainly that the Commissioners have not troubled themselves to look beneath the merest surface technicalities. For example, if in filling in a form the certifying person chanced to omit a statement in some blank space of the vocation of the alleged lunatic, he would be called to order; but if he filled another blank space with the veriest rubbish in the way of evidences of insanity, the Commissioners cared nothing for that palpable fact. Unless something be done to make these gentlemen understand that they are to do more than mere clerks' work, the provisions of the Act will fall flat. Let anyone who knows the working of the Commissioners' office at present ask himself what is likely to be the practical result of a provision such as this: "In the case of a private patient in an asylum, the Commissioners, after receiving the report [that is, the report to be sent to them by the medical officer of an asylum at the expiration of one calendar month after the reception of a private patient], shall either make arrangements for a visit being paid, *as soon as conveniently may be*, to the patient therein named by one or more of the Commissioners, or," &c. Beyond question, in as many cases as possible the Commissioners will content themselves by referring the matter to the committee of visitors of the asylum, as the Act allows, and for the rest, "as soon as conveniently may be" will mean anything from a month to three months. Probably it will amount to this, that at the next routine official visit to the asylum the Commissioners who chance to go will be charged to inquire for the patient named in the report, and his or her name will perhaps have two ticks on the list instead of one. If any good is to be done by the passing of this Bill, failure through official neglect must be guarded against at every point. Nothing can safely be left to the Commissioners in Lunacy, and unfortunately much has been left to them, with the gravest peril of reducing the Act to the level of a new incumbrance of the statute book. The provisions throughout are far too permissory in their character. They should order where they now simply allow. This is especially necessary in all that relates to the main purpose—namely, the protection of the alleged insane.

The effect of the measure as regards the gradual superceding of the private-asylum system is, we think, likely to be satisfactory. The Secretary of State can enforce the provision of sufficient accommodation for both pauper and non-pauper cases; and the interest of local financiers will be to receive private patients into public asylums because the profits made in this way can be applied to the relief of the rates by defraying other costs of the asylum. This appeal to the commercial instinct may doubtless be trusted to produce sound fruit. It is much to be regretted that the care of the "sane or insane" cannot be placed on an equally practical footing with respect to the discrimination between suitable or unsuitable cases. Unfortunately, when the committees of public asylums become *de facto* themselves private asylum keepers, making a profit out of every nedical profession would understand by medical science, ut preferred to be treated by the representatives of medical system which is ignored by every University of Europe and by scientific men generally, and the chief representatives of which in England have fundamentally changed their ground. But where our contemporary has gone farthest wrong is in supposing that there is an alarming increase in the frequency of such deaths as that of Lord CAIRNS as compared with the palmy days of bloodletting. No mistake could be greater. The mortality of such cases has been immensely reduced by improvements in modern treatment, and especially by the leaving in the veins of the patient the large quantities of blood which used to be "drawn," as our new censor says. One physician alone, the late Dr. J. HUGHES BENNETT, has recorded 105 cases of *uncomplicated* inflammation of the lungs *without one death*, though many of the cases were severe, involving the whole of one lung in fifteen and both portions of lungs in twenty-six cases. His system of treatment, now generally followed, is described by himself as "treatment by restoratives, directed to further the natural progress of the disease and supporting the vital strength." He entirely avoided "drawing" large quantities of blood, under which the mortality was certainly infinitely greater. We cannot answer for the treatment pursued in Lord CAIRNS' case. It is quite possible, in the dilapidated and demoralised state of homœopathy, that it did not differ from that practised now by most sensible physicians. The fatal result may have been due to the occurrence of a sharp pulmonary congestion or a pneumonia in a constitution by no means vigorous or healthy, and worn by the labours of an anxious profession and position. But one thing we will venture to say without hesitation, that the omission of phlebotomy was not a subject for censure, and that our contemporary will have to find other cases than that of Lord CAIRNS on which to revive a practice so questionable as the "fashion" over the disappearance of which he seems to sigh, and which, like many other fashions, is generally more honoured in the breach than in the observance.

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THE lecture on the Sanitary Condition of our Homeless and Nomadic Populations, delivered by Dr. RICHARDSON on Saturday before the Association of Sanitary Inspectors, has struck a chord which has caught the attention of the people in a very remarkable way. It is one of the often-expressed sayings of the author of the lecture that many of his efforts which have gained most public favour have been those which have cost him least trouble and the *smallest* amount of preparation. The lecture opened with an intimation that the services of the sanitary inspectors might be extended with good purpose and effect to the inspection, under skilled direction, of the condition of the people who live without any fixed home. The people thus named were then divided into three classes. The first, the vagrant class, who have no home of any kind, who sleep anywhere, and get food anyhow. The second, the itinerant trade and showman class, who wander about the country in vans, using the van as the living and sleeping house, as well as the storehouse. The third, the pure nomadic class, who still live altogether under canvas—tent-dwellers proper, or gipsies. The conditions of health of these three classes were then compared and contrasted *inter se*, and, by inference, with the members of the ordinary community. To the vagrants a life of a truly unhappy and worthless kind was accorded, but it was indicated that with all their misery they and theirs were less subjected to the decimating zymotic diseases than the members of the industrious populations aggregated in large cities and towns. It was further pointed out as a singular fact that these vagrants wandering to and fro amongst the people, wearing the cast-off and often infected clothing of the people, and occupying common lodging-houses in which the most simple hygienic rules prevail, rarely carry about with them any of the contagious diseases, and rarely suffer from them. The same rule was to a certain extent true in respect to the people who travel and live in the vans, but these are *much more* subjected to other diseases, induced even in the midst of nature, "under the canopy itself," when they begin to shut themselves and their families up "in a travelling experimental room." They then become anæmic and scrofulous, and are affected with consumption of the lungs from a rude and unscientific, though practical, synthesis of that formidable destroyer. As to the true nomads or gipsies who continue still to live in tents, their fate is indeed singular, in so far as the lecturer's observation extended to them, observation which seems to have won *the special attention of hearers and* readers. Dr. RICHARDSON said that in his early professional life, when he was associated in practice with the late well-known Dr. ROBERT WILLIS of Barnes, he had under his care for some months, on Barnes-common, a gipsy lad living in a tent, who had sustained an injury to the spine, and that during this long attendance he had gathered a number of facts relative to the gipsy life, and had learned a little of the language of this singular Indian trail, some words and sentences of which he still remembered and explained. From this and later sources of information he came to the conclusion that the gipsies, perhaps comparatively short-lived—although there were exceptions to this rule,—are remarkably free, so long as they remain in the tent, from the spreading diseases of the community at large. They seemed in this primitive condition to know nothing of small-pox, though little protected by vaccination, and he had never met with one of them pitted with small-pox. In 1850-51 the gipsies on Barnes-common were surrounded with cases of scarlet fever in the neighbouring places, but they all escaped, although they took no precautions, and in fact were absolutely ignorant or indifferent about the matter. More curious still was the statement of the lecturer that he had failed to find a gipsy man, woman, or child in the pure nomadic state who showed evidence of syphilis, either in its primary, secondary, or tertiary stages, and he referred to the perfect condition of their teeth as a corroboration of the truth of this noteworthy observation. When the nomadic gipsy changed his mode of life, when he settled in cities and towns, and so came "under the influences of a higher and more cultivated civilisation," then, doing at Rome as Rome does, he gets what Rome gets. But in his primitive state he seems to escape this, the most corrupting scourge of the human family in its more advanced social life. Altogether, the lessons derivable from the lecture were that poverty of itself, unless pushed to absolute famine, had nothing to do f the egg, as helenina had done. Korab found that a few rops of a solution of helenina immediately killed the rganisms in ordinary infusions, and also in cultivations of the tubercle bacillus. While the writer was working with helenina in his laboratory, he noticed that the bad odours usually present in the vicinity were replaced by the aromatic smell of the drug, due to the washings thrown away. He also noticed that insects, which were commonly very numerous, were at that time absent; even the mosquitoes were kept away from the whole house during the months in which they specially abound. The drug has proved most valuable in surgery as an antiseptic when carbolic acid and other agents had failed. It has been successfully given internally in malarial fevers, tubercular, infantile, and catarrhal diarrhœa; and it is expected to prove an excellent substitute for carbolic acid in the Listerian system of aseptic surgery. The dose is about a third of a grain in pill or mucilage, and the price about a penny a grain.

THE FAVERSHAM JOINT HOSPITAL BOARD.

COMBINATION of sanitary authorities for the purpose of providing infectious diseases hospitals has so many advantages that the system has been largely favoured by the Local Government Board. The scheme involves but a comparatively small increase of cost over a hospital provided by a single authority, for one site, one boundary wall, one set of buildings for ambulance, laundry, disinfecting, and mortuary purposes suffice for two authorities, just as it does for one only; and even as regards the ward-pavilions, only some increase in the number of beds, and not of the buildings, is, as a rule, needed. Some time since, on the application of the urban and rural authorities of Faversham, and after public inquiry at which all parties seemed unanimous, the Local Government Board issued a provisional order forming the two authorities into a joint hospital board. From that moment, however, dissensions appear to have sprung up; disputes occurred as to the site and the character of the buildings, and at last the joint board suspended its meetings, having in the first instance applied to the central authority to be dissolved. But the board having been formed with the approval of Parliament for a definite purpose, the Local Government Board decline to sanction the dissolution except on the definite understanding that each authority will singly perform its duty in the matter of providing means of isolation. No such guarantee appears to be forthcoming, and the whole matter is at a deadlock. This is to be regretted. Both authorities have a considerable population among the labouring classes, who, when infectious disease appears in their homes, have no proper means of accommodation for the sick, and are utterly without such means as would suffice to stay the spread of infection. The elections which are about to take place as to local affairs may perhaps set the matter again on a proper footing, and thus the two authorities may be spared from acting without proper judgment in regard to a step which is of considerable importance to the health of their respective districts.

TRANSFUSION OF BLOOD.

THE public mind has been much astonished and bewildered during the past few weeks by the reports, through the general press, of certain experiments on transfusion of blood said to have been carried out at Denver, Colorado. The popular mind has been astonished and bewildered many times before now on the subject of transfusing restoratives into the circulation of men and animals. The operation starts, indeed, in mystery. Æson, the father of Jason of the Golden Fleece, becoming infirm, Medea, after drawing the blood from his veins, refills them with a potent fluid, and the old man, so runs the fable, rejuvenates. Libavius of Halle, in the early part of the seventeenth century, improves on this fable by suggesting the actual transfusion of blood. Christopher Wren, in the eighteenth century, gives the idea more distinct form; and Richard Lower, Edmund King, and Denis actually bring it into practice, with such effect that the world, startled by the first results and filled with admiring wonder, soon turns round, in disappointment at failure, and lets the Pope prohibit the operation in all parts where his mandate was law. Over and over again the wonder has, nevertheless, revived. Early in this century, Professor Harwood of Cambridge revivified a pointer that had been bled, as it seemed, to death by transfusing into it the blood from a sheep. Later on in the century Dr. Blundell made some remarkable experiments precisely similar in character, and now we have the same retold in a new dress, either by repetition of mere narrative or by repetition of experiment—which it is difficult as yet to say. Of the report going the round of the press it is quite impossible, at present, to speak with any certainty. The account may be nothing more than a piece of clever writing based on an imperfect knowledge of previous researches. It may be the account of some experiments similar to those we have described, but reported with more of enthusiasm than accuracy. We cannot tell. All we can say is that the absence of technical mode of description, some errors of detail, and the absence of reference to all previous research on the subject, together with the notice of many proceedings which according to our present knowledge would destroy the value of transfusion as a means of restoring suspended life, make us most cautious in accepting any part of the statement until it is corroborated by other and more trustworthy evidence.

FRUIT AS AN ARTICLE OF DAILY DIET.

ONE of the most salutary tendencies of domestic management in our day is that which aims at assigning to fruit a favoured place in our ordinary diet. The nutrient value of such food, in virtue of its component starchy and saccharine materials, is generally admitted; and while these substances cannot be said to equal in accumulated force the more solid ingredients of meat and animal fat, they are similarly useful in their own degree, and have, moreover, the advantage of greater digestibility. Their conversion within the tissues is also attended with less friction and pressure on the constructive machinery. The locally stimulant action of many subacid fruits on the mucous membrane deserves mention. Its control of a too active peptic secretion, and its influence of attraction exercised upon the alkaline and aperient intestinal juice, are points of more than superficial importance. To this action further effects, which aid the maintenance of a pure and vigorous circulation, are indirectly due. Thus it follows, on the simplest principles of physiology, that other essential organs, such as the skin and kidneys, are relieved by the transference of part of their excretory function to the bowel, and act with greater ease, the general vascular system is lightened by this regulating drain, and its faculty of absorbing the waste products of food and work is encouraged in proportion. Almost all persons in fairly normal health may partake of sound and ripe fruit in greater or less amount. Except in certain cases, indeed, there is practically no exact limit to its consumption under these circumstances. Among such exceptions may be noted the gouty and rheumatic diatheses. A tendency to diarrhœa or a dysenteric history obviously forbids the free or frequent use of fruit. Saccharine diabetes, or nervous conditions in which it is apt to appear, are similarly antagonistic—at all events where any but the non-amyloid fruits, such as nuts, are considered. Dyspeptic stomachs, on the other hand, are usually benefited by a moderate allowance of this light and stimulating fare. It must be remembered, moreover, that every fruit is not equally wholesome, let the digestion be as powerful as it may. Nuts, for example, consisting as they do, for the most part, of condensed albuminoid and fatty matters, cannot compare in acceptance, either by the palate or the stomach, with other more succulent kinds, even though they contain in the same bulk a far greater amount of nutriment. A little of such fruit is enough for digestion, and that little is best cooked. Nevertheless, if we take fruit as a whole, ripe and sound of course, and consider its variety, its lightness and nourishing properties, whether eaten alone or with other food, and its cheap abundance, we cannot hesitate to add our voice in support of its just claims on public attention. In former articles we have shown why vegetable produce of all kinds should enter largely into the food of children. Well-chosen fruits are consequently for them as safe and beneficial as agreeable.

THE GENESIS OF CANCER.

A marked increase in the death-rate from cancer during the latter part of the present century has for some years occupied the minds of several well-known pathologists in endeavours to reveal its cause. There is a pretty general agreement with regard to this disease that it is prone to arise out of prior morbid states which do not appear to be directly or necessarily related to it. It is evolved as a successor to innocent tumours, or in the track of an old inflammatory lesion. It rises apparently *de novo* out of mere senility or exhaustion of tissue, its permanently rudimentary type representing the best efforts of wearied nature to make good the daily wear of more perfect structures. On the other hand, cases occur in which, without impairment in any visible degree of vital power, the energy of some local irritant appears to master so completely the normal process of growth as to maintain its elements in the exuberant imperfection of the malignant tumour. Manifestly the same irritant acting on weak tissues is still more likely to work out its pernicious consequences. If we admit, therefore, as we consistently may, that tissue exhaustion, the result of toil, anxiety, or privation, and whether inherited or directly induced, affords a sufficient basis for the development of cancer, we need not look far into the history of our laborious age to find an explanation of a rise in its death-rate which at first may seem to be anomalous.

WELL WATER AT ENFIELD.

A curious conflict of opinion has occurred in connexion with certain proceedings having for their object the closure of a surface well in the district of the Local Board of Enfield. Dr. Ridge, the medical officer of health, found the water suspicious from a chemical point of view, and still more suspicious because of the nature of the surroundings of the well. On this, proceedings were taken to secure the closure of the well; but the owner in the meantime procured an analysis by Dr. Tidy of water which professed to be that of the suspected well and of another well mixed together. The chemical results were all that could be wished, and the magistrates dismissed the case. The owner was then told that fresh samples would be taken, and this having been done, the analytical results were found not only to differ from the preceding ones, but, curiously enough, the water exhibited the presence of iron. In view of this, further samples were taken in the presence of several people, and this without any notice to the owner until the arrival of those who were prepared to take the water away with them. This time the analyst found chlorine equal in quantity to 18·45 grains of common salt in every gallon, 17·5 grains of nitric acid as nitrates, and no iron. The absence of iron in this sample points to the intentional addition of that substance with a view to a temporary purification of the water by oxidising or precipitating organic matter. The well in question is 16 feet deep; it lies in a district which has sewers with "open joints," and which have, in consequence, fouled the gravelly soil in which the well is sunk. Several of the house and closet drains were also recently found to be leaking through such joints. These circumstances alone amply suffice for the condemnation of the water-supply, and it is a matter of wonder how people can endeavour to show by chemical analysis that a water derived from a soil thus subject to the constant risk of pollution is really fit for domestic purposes. The freedom of individual samples from any indication of the surrounding contamination is a matter that should have no weight beside the fact that the source of the supply is one subject to constant risk of pollution. In this case, however, chemistry also came to the aid of the medical officer of health when the sample dealt with was collected under circumstances which were above suspicion.

CHILDREN IN WORKHOUSES.

The care, treatment, and nursing of children in workhouses is a subject which at the present time calls for more attention at the hands of Local Government Board inspectors and the philanthropic public. After due allowance for the low physical standard of such children, and for their congenital tendency to disease, the excess of mortality that prevails among them is a subject that urgently demands inquiry and action. Inquiry, because Local Government Reports are silent upon the subject; and action, because much of this excess of mortality is assuredly preventable. It is only now and then that facts come to light helping us to call attention to the health condition of these unfortunate children; this makes it all the more necessary not to miss such opportunities. It appears from the last two weekly returns of the Registrar-General, that during the fortnight ending on the 4th inst. no fewer than fifteen children, most of them illegitimate, died from measles in the Camberwell Workhouse, Gordon-road, Peckham. It will be interesting to learn the number of infants in this workhouse, the number attacked by measles, and also whether this startling mortality will be the subject of a Local Government Board inquiry, with a view to ascertaining the kind of treatment and nursing which workhouse children receive on the occasion of such an outbreak of epidemic disease as that now prevailing in the Camberwell Workhouse.

MAD DOGS AT LARGE.

The inhabitants of Sheffield seem to have been lately thrown into a state of consternation owing to mad dogs wandering in the streets. It is reported that special precautions have been taken by the police, and many dogs destroyed. These precautions are praiseworthy in themselves, but we doubt if they will prevent a recurrence of the danger. There can be no doubt that every dog roving at large, unattended, and "without visible means of subsistence," should be arrested as a rogue and vagabond, but the wholesale destruction of these waifs and strays seems unnecessarily severe. What we would suggest is that the number of places of refuge, or "dogs' homes," be extended. Greater facilities would then be given for watching suspicious characters, and for owners to claim their lost property. But these are cases which require peremptory treatment. If a dog is mad, it is worse than valueless to its possessor, whilst it is dangerous to every living being with whom it comes in contact. This might afford some reason, perhaps, why policemen should be armed with revolvers. It is not always easy, however, for the laity to tell whether a dog is the subject f rabies, or merely gifted with vicious propensities. The ecessary knowledge too often only comes of experience, nd the vagrant cur runs fancy free until it has fleshed ts envenomed teeth in some hapless passer-by. Save n a few isolated cases, where canine madness first shows itself in a fortuitous and unprovoked outburst of ostility towards an unsuspecting individual, the premonitory symptoms are sufficiently marked to arouse suspicion and point to danger. Restlessness, loss of appetite, and perversion of the affections are amongst the number. It is not feasible to educate the public in these matters by practical demonstration, but much may be done by way of warning and advice. A code of instructions might be drawn up and circulated by the local authorities, which would be of incalculable value to the community. It may be contended that such a procedure would arouse needless alarm, and condemn many an unoffending dog to a premature death; but against such an objection is the certainty that a number of human lives would be spared the perils of a terrible disease.

INTERNATIONAL HEALTH EXHIBITION.

DR. FELICE SANTINI, medical officer of health of the Royal Italian Navy, who was appointed by the Italian Government commissioner to the International Health Exhibition, has just published his report to the municipality of Rome.[1] He draws special attention to the excellent organisation of the Metropolitan Asylums Board, and the work done by them and the St. John Ambulance Association, and gives illustrations of the various ambulance carriages and stretchers used by these associations, together with a map showing the hospitals in connexion with the Metropolitan Asylums Board and diagrams of the hospital ships *Atlas*, *Endymion*, and *Castalia*, which are moored in the Thames. Dr. Santini was much impressed with the excellent idea of forming a hygienic library in connexion with the Exhibition, and brings to the notice of his Government and the municipality of Rome the services of Mr. Carl A. Thimm, the librarian, who so efficiently arranged and catalogued the voluminous publications contributed by Italy.

VOLUNTEER MEDICAL STAFF CORPS.

THIS corps, although enrolled only on April 1st, put in an appearance at the Brighton Review. Two companies, about fifty strong each, paraded at Wellington Barracks on Good Friday morning in full marching order, and, taking train at Victoria, accompanied the marching columns. No. 1 Bearer Company, under the command of Surgeon-Major Cantlie and Acting Surgeons Leech, Fletcher, and Willett, accompanied No. 7 column, under the command of Col. Sir Lloyd-Lindsay, V.C., and billeted at Burgess-hill. No. 2 Bearer Company, under the command of Surgeon-Major Norton and Acting Surgeons Huzzey and Raw, accompanied No. 2 marching column, and billeted at Newick. On Saturday the companies followed the troops over the downs, and had some rough work with the waggons. The ambulance waggons of No. 1 Bearer Company were blocked for three hours by a transport waggon, which had broken down on a narrow road over the hill. The bearers carried the stretchers over hill and dale for four miles to keep touch with the troops, and only by a forced march were they able to return to pick up their waggons and join the troops in the march into Brighton. No. 2 Bearer Company had to take the horses out and pull the waggons up the downs. At the headquarters of the corps at Brighton a temporary hospital of eight beds was opened, and as many as fifty-three patients were treated between Saturday night and Monday morning. The appearance of the new corps at the march past on Monday was the subject of much congratulation and cheering. The Duke of Cambridge, after the march past, rode up to the head of the column and complimented the corps on its appearance and efficiency. Surgeon Cross, Grenadier Guards, acted as commanding officer, and Surgeon Pearse as his staff officer. Lieutenant McLure acted as adjutant during the march. On the day of enrolment of the Volunteer Medical Staff Corps, an inauguration service was held at the Chapel Royal, Savoy, by the Rev. R. Westhorpe, Warden of Charing-cross Hospital and Chaplain of the Corps. About 180 attended.

THE METROPOLITAN BOARD OF WORKS AS A THEATRE LICENSING AUTHORITY.

THE Metropolitan Board of Works has politely asked the Lord Chamberlain whether he does not think it would make a better licensing authority than he has proved himself, and offered, "if his lordship agrees with this view," to take over the duty. We shall be curious to hear what the Lord Chamberlain thinks of this proposal. If he is wise he will hasten to wash his hands of the business. Meanwhile, will the Metropolitan Board of Works do the work better? And how about the licensing of stage plays? Does the Board propose to take that over also?

REPORT OF THE BERLIN HYGIENIC EXHIBITION.

WE have received a copy of the introduction to the first volume of the Report upon the German Health Exhibition, held at Berlin in 1883. On the close of the exhibition the task of editing this Report, which should survey the whole nature and scope of the exhibition, was placed in the hands of Dr. Paul Börner, who has prefixed to it an introduction detailing the steps taken to promote the exhibition, which was completed and ready for opening when destroyed by fire in 1882. Within twelve months the building was reconstructed on an improved plan; and a description of the building is given, with a brief history of the exhibition from its opening to its close. From the table of contents to the volume it is seen that the descriptive articles of each department are contributed by experts; and the work should therefore have a special and permanent value.

SHOULD AN INQUEST BE HELD?

MR. H. GOTOBED, the Cambridge borough coroner, recently held an inquest on a woman who had died suddenly of heart disease, and gave as his reason for so doing that about two years ago Lord Chancellor Selborne admonished a coroner for neglecting to institute an inquiry into the cause of death of a person found dead in bed. Lord Chief Justice Jervis held that, unless there was reasonable ground of suspicion that the person came to his death by violent and unnatural means, there was no occasion for the interference of the coroner. On the strength of the report of the recent inquest, we fail to see the discrepancy between the legal authorities cited by Mr. Gotobed. A person being found dead in bed, the presumption is that death arose from natural causes; but it would never do to grant a certificate on such wholly insufficient grounds. If, on the other hand, a person was known to have suffered from heart disease, and was subsequently seen to fall down in a fatal swoon, this, together with the circumstantial evidence, might warrant the coroner's decision not to order an official inquiry. At the same time, we contend it is highly desirable that the exact cause of death should, where possible, be determined in every case. Anything short of this obviously allows of mistakes, and possibly in some instances leads to a miscarriage of justice. The records of our judicial proceedings clearly show that what has *à priori* been thought satisfactory proof of natural death has been really consistent with criminal intent and deeds.

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[1] L'Igiene Pubblica e Privata e la Didattica alla Esposizione Internazionale d'Igiene in Londra, 1884. Rapporto all'onorevole Municipio di Roma, del Dottor Felice Santini. Roma: Fratelli Bencini. 1885.

OPPOSITION TO THE POISONS BILL.

THE opposition to the provisions of the new Poisons Bill continues with unabated vigour. In an article devoted to the subject in one of the trade journals, it is pointed out that the powers assigned to the Pharmaceutical Society are amply sufficient if only they were exercised with discretion. The omission in the Bill to define the term "poison" has been severely criticised, although it must be confessed that the difficulties in the way of a satisfactory definition are very great. Almost any substance capable of being absorbed into the circulation or of mechanically irritating the mucous membrane to a sufficient extent might cause death, the quantity necessary to induce a fatal result being one of degree only. A case is referred to of a gentleman who was poisoned by eating jugged hare in an advanced stage of decomposition. It is supposed that a fragment of bone caused an abrasion of the mucous membrane of the mouth or throat, and that this sufficed for the absorption of septic material. In another instance a young lady succeeded in destroying herself by swallowing a pound and a quarter of common table salt. Under the proposed Act it is probable that vendors of patent medicines containing active ingredients will incur a certain amount of responsibility, although the clauses dealing with the subject are so vaguely worded that it is difficult to foretell what will be the practical result of their operation. It is probable that the Bill, if not thrown out altogether, will be considerably modified in Committee.

PREVENTABLE DISEASES IN TOTTENHAM.

THE Tottenham Sanitary Association, which for many years past has done good work in stimulating sanitary work in its district, now publishes its eleventh report—namely, that for 1884. In a population of some 70,000, the death-rate was 16·45 per 1000. Typhoid fever and diphtheria were both excessive in their fatality, the last disease being three times more fatal than it was during the same period in London. As a result of this occurrence, special efforts are being made by the sanitary inspector to elicit information as to the state of the drains, their disconnexion and ventilation, whenever fatal zymotic disease occurs. This is good in its way; but it would be far better if, in addition to such action after the occurrence of the very result which should be avoided, the authority were to organise such a system of house-to-house inspection as would lead to the adoption of measures which would prevent the occurrence of diseases due to faulty drain connexions.

PERFORATING ULCER OF THE HAND.

THOUGH perforating ulcers occurring in the course of tabes dorsalis have their usual seat in the foot, there seems no reason why the hand should not be similarly affected. M. Terrillon showed a case of perforating ulcer of the palm of the hand at a recent meeting of the Société de Chirurgie. The ulcer was situate at the junction of the ring finger with the palm. The patient was a porter, and the subject of tabes dorsalis. M. Charcot did not hesitate to regard the ulcer as of dystrophic origin; pains and tinglings were experienced by the patient along the course of the ulnar nerve. A zone of anæsthesia was detected all round the ulcer. M. Nicaise inclined to the opinion that the ulcer was merely a corn which had become fissured, for the epidermis and cutis were thickened, whereas in perforating ulcers the cutis is thinned and even perforated.

ANTHRAX IN BERMONDSEY.

FROM time to time during the past few years cases of fatal anthrax have been reported at Guy's Hospital, arising in connexion with the Bermondsey tanneries. The most recent case occurred last week. The subject was a labourer, aged thirty-eight, employed in handling hides at a wharfinger's. Less than four days before his death he complained of feeling sick, and noticed a small pimple on the side of the neck; and the next day he presented himself at the hospital with well-marked symptoms of malignant pustule. At the inquest Mr. Langham, the coroner, drew public attention to the great importance of persons infected with the poison making early application for hospital treatment. The verdict of the jury, "Natural death from blood-poisoning," seems to us to have been scarcely sufficient; for it cannot be too widely known that the disease contracted from these infected hides is a definite and specific affection, and that every precaution should be taken to protect workmen against contamination.

EXPERIMENTS ON SOLDIERS' RATIONS.

EXPERIMENTS are being made in Munich, Mayence, Munster, and elsewhere, with companies specially formed of the strong men of different regiments. The men selected are obliged to submit for a fortnight to a strict campaigning diet, and during this period have to go through field exercises and route-marching for six hours daily in full marching order. Before and after every march out each man is carefully weighed. He receives daily a regulated quantity of a minutely described dietary—e.g., in Mayence, biscuit, coffee, pea-sausages (*Erbswurst*); in Munster, rye bread, brandy, and *Erbswurst*; the Munich *menu* has so far remained a secret. The men are constantly and closely watched, so that it is impossible for them to obtain any other food or drink than that laid down. The object of these experiments is to determine how long men will remain fit for work on such diet, and also to institute a comparison between the different diets tested.

ANTISEPTICS AND ERYSIPELAS.

FROM a statistical study of the surgical cases which have been under his care during the past five years, M. Polaillon has come to the conclusion that Listerism and carbolic dressings generally do not diminish the liability to the occurrence of erysipelas, though they lessen the virulence of the disease. In his experience women are more frequently affected than men, but the latter occupy the more salubrious ward. Sometimes the erysipelas occurred in isolated cases. Erysipelas was more frequent during the cold and wet months. Carbolised dressings, he avers, certainly attenuate the virulence of erysipelas. He has seen epidemics spread from patient to patient rapidly, yet making but few victims, and those only whose constitutions were enfeebled by long-lasting disease.

BALNEOLOGICAL CONGRESS.

THE seventh annual Congress of the Balneological Section of the German Therapeutical Society was held on March 14th and 15th at Berlin, under the Presidency of Professor Liebreich. Dr. Schott of Nauheim spoke regarding the importance of cutaneous resorption in connexion with the effects of baths. Dr. Grödel raised the question whether special balneo-therapeutical methods could be defined for various forms of spinal affections, but the discussion which ensued bore unfavourably on the possibility of such a treatment being perfected. Professor Eulenberg of Berlin spoke on the subject of electric baths, and the mode of their application to therapeutical purposes.

THE LONDON UNIVERSITY AND MEDICAL DEGREES.

WE understand that the Senate of the University of London have consented to receive, on the 29th inst., at 4.45 P.M., a deputation from the Metropolitan Counties Branch of the British Medical Association in reference to the question of granting medical degrees to London medical students.

THE GENERAL MEDICAL COUNCIL.

THE General Medical Council is summoned to meet on Tuesday, May 12th. The Executive Committee will meet on the preceding day, to arrange the order of business, &c.

THE DEATH OF LORD CAIRNS.

WE have authority for saying, contrary to the statement of some newspapers, that Sir William Gull never saw Lord Cairns medically, and was never requested to see him.

THE BICHLORIDE DOUCHE IN OBSTETRICS.

THE *New York Medical Record* reports that Dr. Hulbert, of St. Louis, stated, at a meeting of the St. Louis Medical Society, that he had salivated five patients with a bichloride solution (1 in 3000) given as a vaginal douche twice a day. No particulars are given, but it is evident that this agent, though a very effective antiseptic, will have to be used very carefully.

DR. J. F. STEVENSON, J.P., has just resigned the post of physician to the Birkenhead Borough Hospital. He was appointed as honorary surgeon to the institution in 1848, and having filled that office for a period of fifteen years, was appointed to the office which he has just resigned. Dr. Stevenson will continue his connexion with the charity as consulting physician. The committee have formally recorded their high sense of the valuable and efficient services rendered by Dr. Stevenson for this period of upwards of thirty-six years. Dr. Stevenson is to be congratulated, as it is not given to many members of even the medical profession to complete so long a term of gratuitous daily work.

SOME very exaggerated reports having been circulated concerning the prevalence of small-pox at Southend, it is well to mention that the case which is supposed to have been the first was not small-pox at all, but pleurisy; also that the sexton who was employed at the funeral, and who really died of small-pox shortly afterwards, caught the disease from his son, who was found to be suffering from it on his arrival from near London, and who has now recovered. We believe that, owing to the isolated position of the house and the care exercised by the medical officer of health, no other cases have occurred.

A CONTROVERSY on the subject of undue pressure in the public schools of America has been proceeding for some time, and from the *New York Daily Tribune* of the 24th ult. it now appears that the advocates of reform are steadily gaining ground, it being expected that the much-needed revision of the course of study and method of examinations in American schools will be substantially accomplished before the beginning of a new school year.

AN outbreak of English cholera, causing considerable alarm, is reported from Mountain Ash, where many people are affected in one part of the district called Caegarw, and one man has succumbed to the malady.

AT the Teachers' Conference at Norwich on the 8th inst., Mrs. Burgwin (Southwark) read a paper on over-pressure in schools, which she described as work against time to secure payment by results—a system injurious to teachers and torture to children, who were made disgusted with learning. She advocated the abolition of all grants under certain conditions, considering that education should not be hurried. A resolution was adopted to petition Parliament to appoint a Royal Commission to inquire into the existence, causes, and extent of over-pressure, it being felt that a departmental inquiry would not be satisfactory.

AT Jativa, in the province of Valencia, seventy persons have been attacked during the past fortnight by a disease resembling cholera. About half the cases ended fatally, and although several physicians have hesitated to pronounce the epidemic to be cholera, others who were sent to inquire into the outbreak affirm that it is that disease, and precautions have been taken to prevent its spread. The patients and their families have been put under canvas, and the houses where deaths have occurred have been disinfected.

MR. M. A. ADAMS, F.R.C.S., has devised a card containing the leading facts of importance in the record and investigation of contagious diseases. It embodies a neatly drawn-up chart to indicate the presumed normal periods of latency, premonitory fever, duration of pyrexia, and of the infectiveness of such diseases; and, being of convenient size, it should prove of some service. It is issued by Messrs. Churchill.

THE Paris correspondent of the *Record* says:—"A remarkable instance of confraternity has just occurred at Carcassone at the funeral of an eminent doctor, a Roman Catholic, who behaved most nobly during the last cholera epidemic. Three discourses were pronounced at the cemetery, one by the prefect of the Department, one by the president of the Doctors' Association, and one by the [Protestant] pasteur of the place, the Rev. Ad. Monod."

MR. ARNOLD TAYLOR, of the Local Government Board, has been holding an inquiry in the Ramsgate Town Hall concerning the loan of £20,000 required for the completion of the drainage and for the construction of new outfall works. Various difficulties and objections having been overcome, the opposition to the proposed scheme was nominal, and Mr. Taylor signified his intention of reporting favourably on the plan.

THE fourteenth Congress of the German Surgical Society met at Berlin on the 8th inst., under the presidency of Professor Langenbeck, who announced, to the manifest approval of the members, that the Committee had been pleased to nominate as honorary members Sir James Paget and Sir Joseph Lister.

WE are asked to state that applications for the appointment of Assistant Physician at Guy's Hospital, rendered vacant by the promotion of Dr. Frederick Taylor to the Physicianship, should be sent in on or before Thursday, the 30th inst.

WE learn that, at the unanimous request of the medical staff of the Paddington-green Children's Hospital, the post of senior physician will be filled by the appointment of Dr. Lauder Brunton.

THE eighth edition of Erichsen's Surgery is being translated into Spanish, and is appearing in monthly parts.

DR. ANGEL MONEY has been appointed Assistant Physician to the Hospital for Sick Children, Great Ormond-street, in the place of Dr. Barlow, promoted to the post of Physician to the institution.

IN a letter to the Lord Chancellor, dated April 6th, the Earl of Shaftesbury has expressed his decision to resign his seat on the Board of Commissioners in Lunacy.

THE

DRAMATIS PERSONÆ OF THE TERCENTENARY FESTIVAL OF THE UNIVERSITY OF EDINBURGH.

WE have good news for the alumni and graduates of the Edinburgh University. The event of the Tercentenary was one not likely to be forgotten. In itself it was one of the most remarkable gatherings of the men of light and leading in history. It produced, too, the "Story of the University," by the lamented and accomplished principal, Sir Alexander Grant, which is in itself guarantee that it will not be allowed to be forgotten. But as if this were not enough, a most exquisite volume of "Portraits of the High Officers and Professors of the University of Edinburgh at its Tercentenary Festival" has been published at the University Press by Messrs. T. and A. Constable. The volume before us, which is so charming as to disarm all criticism, is in a quarto form; but we gather that there are a certain number of folio copies to be had by those still more luxurious in their literary tastes. For ourselves, we are well content with and very grateful for the quarto form, which makes one of the pleasantest and most valuable additions to a library which we have seen for many days, and which cannot be too much praised either as regards the work of the printer, the compiler, or the artist. The artist is Mr. William Hole, A.R.S.A., who had already given some artistic intimations of the vivid impression made on his mind by the chief actors of the Tercentenary. In the forty or fifty portraits now presented to the public, the art of etching appears to the greatest advantage, and will hand down to a remote time a representation of the present professors. Even those learned professors whose physical qualities do not facilitate the etcher's art come out in style so natural and life-like as to be most interesting. And in the case of a few of the portraits, the result is most effective, as in that of Sir Stafford Northcote, of the lamented Principal, of Professor Blackie and his successor, of Professor Masson (in his slippers, sitting cosily by his fireside, and, low be it spoken, in the obvious enjoyment of his meerschaum), of Professor Turner, of Professor Fraser, of Professor Douglas Maclagan, of "John Chiene," of Professor Grainger Stewart, of Professor Rutherford, and of Professor Greenfield. Perhaps the most striking piece of art in the book is the portait of Professor Giekie, sitting on a boulder, a hammer in one hand and a geological specimen in the other style. The interest of the volume is greatly, if pathetically, enhanced by a frontispiece entitled "*Umbræ Quædam*," and giving the heads of professors and others recently dead who have shed lustre on the university, and whose fame still gives a strange fascination to the school—notably Sir William Hamilton, John Goodsir, David Brewster, James Syme, J. Y. Simpson, J. Hughes Bennett, R. Christison, J. H. Balfour, T. Carlyle, and others. Though the etchings and the general style of the book are the chief attractions of this happily conceived work, we should do great injustice to its promoters if we did not say a word in praise of the biographical sketches which are attached to each portrait. They are remarkably well done, occasionally perhaps betraying a little too much local complacency, but generally most readable and instructive. We cannot too strongly express our pleasure in possessing such a memento of so eventful an occasion. The only qualification of our satisfaction we have to make in our announcement of the book is that the number of copies is, we presume necessarily, limited. The impression for sale of the folio copies is 100, that of the quarto 750. *Beati possidentes!*

INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY.

THE first International Congress of Hydrology and Climatology will be held at Biarritz in October, 1886. Amongst the principal questions which will be brought before the members of the Congress are the following:—The Influence of the Phenomena of the Air on Mineral Waters, the Electrical Phenomena which manifest themselves in the presence of Mineral Waters, the Combinations which form Sulphur in the Waters termed Sulphur Waters, the Differences of Action between Fresh and Salt Water in Hydrotherapy, the Hygienic and Dietetic Rules to be observed whilst undergoing a course of Thermal Treatment, the daily Variations of Temperature in Sanitary Stations, General Characters of the Geological Constitution of the Pyrenees, the Hygienic Conditions which ought to prevail at Summer and Winter Health Resorts, the Influence of Sea Air upon Scrofulous Affections, the Influence of Winds, Quarantine by Land and Sea, &c. The Congress will last for eight days, and excursions to various places of interest in the neighbourhood will take place. The honorary president is the Minister of Commerce, and the acting president will be Dr. Durand-Fardel, the post of general secretary being filled by Dr. F. Garrigon.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Worcester Urban District.—In submitting his eleventh annual report to the Town Council of Worcester, Dr. Strange gives marked attention to cleansing of ashpits and cesspits, to the care of sewers and house-drains, and to the supply of drinking water to the inhabitants; and he does so with special reference to a somewhat heavy visitation of enteric fever from which the city has suffered. In the first place, Worcester still exhibits some of the old huge ashpits and cesspits, receptacles which were contrived in days when sanitary authorities were all but unknown, and when scavenging was a thing to be carried out as seldom as possible. Now, however, we know that these accumulations are hurtful in the extreme, and it should be a first object of the authority to get rid of such nuisances, especially in view of the risk they are to health. Much is, fortunately, being done in this direction, and it is to be hoped that there will be no need to recur to them in future reports, except as barbarisms of the past. As to the sewers, it is stated that complaints are made with respect to the emanations from the ventilators; but we can hardly agree with Dr. Strange that, inasmuch as these ventilators are only discharging their proper function, it is unwise to complain of them. Sewer ventilators should not stink. If they do, they are either not sufficiently numerous, or the sewers do not properly cleanse themselves, or else offensive house-drains are connected with them and foul them. If the sewers and house-drains are properly constructed so as to contain no stagnant contents, and if the ventilators are so numerous that a large number of them act as fresh-air inlets to dilute the sewer air before it escapes, then nuisance should not arise. But we fear that faulty conditions as to this exist in Worcester; for Dr. Strange talks of sewer air being forced back into dwellings unless it can escape into the streets. Such a forcing back should be impossible if there were an absolute break between the interior of the houses and the interior of the drains. In many hundred cases this break has now been effected in Worcester, and it is to be hoped that it will soon be universal. The detailed account given as to the water-supply to the city, now derived from the Severn, raises some very important considerations. As matters now stand, the Severn is liable to pollution by sewage and other organic matter after a heavy rainfall. Thus, the sewage of Kidderminster, during the great enteric fever epidemic there, got into the Severn fourteen miles above the Worcester intake, and the question now being dealt with is whether Worcester is to endeavour to remedy its river supply and improve its method of filtration, or to resort to an artesian well. In seeking advice, the opinion of the borough analyst has been sought, especially as to whether filtration would secure the inhabitants against "this great rce of danger" (i.e., "pollution by the germs of disease"), d he has answered, "If efficiently carried out, I believe it es." What this belief is based on we do not know, but e are quite certain that this view should not be acted on s regards a town water-supply. No such filtration as can e carried out by Worcester is likely to have the effect they wish to attain; and if the river is to remain subject to any such risks as hitherto, we should counsel its abandonment as a source of water-supply. The annual death-rate in Worcester for 1884 was 20·9 per 1000. Thirty-two cases, chiefly of enteric fever, were admitted into the Brabourne Hospital.

Lewes Urban District.—Lewes has for some years past had a satisfactory death-rate. Last year it reached 15·9 per 1000, somewhat in excess of the two previous years. Consumption is a somewhat fertile source of death, and we fear that the situation of the town at the foot of a chalk range in a river valley is a main cause in producing this result. The isolation hospital continues usefully to fulfil its purpose. The numbers admitted are not large, but the admissions prevent the extension of infectious disease, and, as Mr. Braden says, it would be impossible to say what mischief the thirty cases admitted since its construction would have brought about had they not been isolated.

Surbiton Urban District.—This suburban district enjoys a small death-rate. It was 10·8 per 1000 in 1883 and 11·9 in 1884, the rate for England and Wales during the latter year being 19·6. The zymotic rate is also low—namely, 1·4 per 1000. Infantile diarrhœa, too, which may be regarded as affording a valuable criterion of the healthiness of a place, only causes about 2 or 3 deaths per annum; in short, as a zymotic affection it is practically absent. Well water is, however, still resorted to, analysis almost invariably being such as to call for its abandonment. The ventilation of the sewers is engaging the attention of the authority, and a number of high shafts are being erected. There is as yet no hospital for infectious diseases. The neighbouring authority of the Kingston rural district have set an example as to this, and Dr. Coleman suggests inquiry as to whether Surbiton may share in its advantages.

Torquay Urban District.—The sanitary inspector for this district has issued a report showing the progress which has been made during the past year in the various matters coming within his cognisance, and it is certainly a record ery substantial advance. The detailed account of current rk relating to such matters as the ventilation of drains d soil-pipes, drain disconnexions, closure of wells, dis- fection of rooms, &c., relates to 4639 improvements. In ldition to this as many as 545 new houses have been over- oked during the course of their erection. The change hroughout the town from old, unventilated, choked, clay- ointed, untrapped drains to efficient, self-cleansing, and well ventilated conduits is in itself immense, and added to this work a large amount of incidental improvement has been effected in allied matters. Torquay aims at securing the reputation of being a real health resort, and such work as Mr. MacMahon gives an account of is eminently calculated to attain that end.

Belfast.—During the four weeks ending Feb. 21st the total births registered were 493, and the deaths 472, which latter included 216 deaths from lung affections. The average death-rate was, from all causes, 28 per 1000, from zymotic diseases 2·6, and from lung diseases 12·6. The general death-rate was a little higher than in January, though the rate from lung affections was 2 per 1000 less. Scarlatina still lingers amongst the population, but it is gratifying to learn hat both typhus and enteric fevers have almost dis- ppeared.

Cork.—During the four weeks ending the 21st ult. the births numbered 152, or a rate of 24·66; and the deaths 204, including 41 which took place in the workhouse. Excluding the latter, the mortality was equal to 33·09 per 1000. Compared with the corresponding return of last year, the death-rate has increased, and the birth-rate decreased.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5450 births and 3937 deaths were registered during the week ending the 4th inst. The births were 362 below, while the deaths exceeded by 310 the average weekly numbers during 1884. The annual death-rate in these towns, which had been equal to 23·5 and 23·2 per 1000 in the preceding two weeks, further declined last week to 23·1. During the thirteen weeks ending last Saturday the death-rate in these towns averaged 21·9 per 1000, against 24·7, the mean rate in the corresponding periods of the nine years 1876-84. The lowest death-rates in these towns last week were 15·7 in Leicester, 17·8 in Bradford, 19·1 in Brighton, and 19·8 in Wolverhampton. The rates in the other towns ranged upwards to 32·6 in Norwich, 33·7 in Newcastle-upon-Tyne, 34·3 in Preston, 34·7 in Oldham, and 40·4 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 466, against numbers steadily increasing from 377 to 451 in the preceding five weeks; they included 173 from measles, 130 from whooping-cough, 45 from "fever" (principally enteric), 33 from scarlet fever, 32 from small-pox, 27 from diphtheria, and 26 from diarrhœa. No death was referred to any of these diseases in Derby last week, whereas they caused the highest death-rates in Norwich, Newcastle-upon-Tyne, Cardiff, and Sunderland. The highest death-rates from measles occurred in Bristol, Newcastle-upon-Tyne, Cardiff, and Sunderland; from whooping-cough in Oldham, Bristol, and Preston; from scarlet fever in Preston and Newcastle-upon-Tyne; and "fever" in Plymouth and Norwich. Of the 27 deaths from diphtheria in the twenty-eight towns 16 occurred in London and 2 in Norwich. Small-pox caused 54 deaths in London and its outer ring of suburban districts, 2 in Manchester, 1 in Birmingham, and 1 in Leeds. The number of small-pox patients in the metropolitan asylum hospitals, which had been 830 and 865 on the preceding two Saturdays, further rose to 879 at the end of last week; 141 cases were admitted during the week, against numbers increasing from 94 to 179 in the previous four weeks. The Highgate Small-pox Hospital contained 90 patients on Saturday last, 25 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 487 and 448 in the preceding two weeks, rose again to 478 last week, but were 65 below the corrected weekly average. The causes of 100, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Bolton, Wolverhampton, and Plymouth. The largest proportions of uncertified deaths were registered in Oldham, Preston, Sheffield, Halifax, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 24·2 and 23·3 per 1000 in the preceding two weeks, rose last week to 25·0, and exceeded the rate last week in the twenty-eight large English towns by 1·9. The rates in the Scotch towns ranged from 15·2 in Leith and 17·0 in Edinburgh and Aberdeen, to 30·8 in Paisley and 31·5 in Glasgow. The 600 deaths in the eight towns included 34 from whooping-cough, 23 from measles, 11 from scarlet fever, 6 from "fever" (typhus, enteric, or simple), 5 from diarrhœa, and not one from small-pox; in all, 84 deaths resulted from these principal zymotic diseases, against 85 and 73 in the preceding two weeks. These 84 deaths were equal to an annual rate of 3·4 per 1000, which was 0·7 above the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough, which had been 35 and 32 in the previous two weeks, were 34 last week, of which 22 occurred in Glasgow, 4 in Edinburgh, and 4 in Dundee. The 23 fatal cases of measles showed an increase of 8 upon the number in the previous week, and were all returned in Glasgow. The 11 deaths from scarlet fever also showed an increase upon the number in the previous week, and included 5 in Paisley, 3 in Glasgow, and 2 in Edinburgh. The 6 deaths referred to "fever" corresponded with the number in the previous week, and included 3 in Edinburgh and 2 in Greenock. The deaths from acute diseases of the respiratory organs in the eight towns, which had been 124 and 122 in the previous two weeks, rose to 130 last week, and exceeded the number in the corresponding week of last year by 22. The causes of 103, or 17 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 39·5, 34·6, and 40·4 per 1000 in the preceding three weeks, declined again to 33·6 in the week ending the 4th inst. During the thirteen weeks ending last Saturday the death-rate in the city averaged no less than 34·0 per 1000; whereas in the same period the rate did not exceed 21·6 in London and 20·0 in Edinburgh. The 227 deaths in Dublin last week showed a decline of 46 from the exceptionally high number in the previous week, and included 24 which were referred to the principal zymotic diseases, against 30 and 32 in the preceding two weeks. Of these 24 deaths, 13 resulted from measles, 5 from "fever," (typhus, enteric, or simple), 4 from diarrhœa, 2 from scarlet fever, and not one either from small-pox, diphtheria, or whooping-cough. The annual death-rate from these principal zymotic diseases was equal to 3·5 per 1000; in London and Edinburgh the rates from these diseases last week were equal to 2·6 and 2·1 respectively. The fatal cases of measles in Dublin, which had been 16 and 12 in the previous two weeks, were 13 last week. The deaths referred to scarlet fever and "fever" were respectively 5 and 1 below the numbers in the preceding week. Three inquest cases and 3 deaths from violence were registered within the city; and 86, or 38 per cent., of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline from the high numbers in the previous week. The causes of 26, or 11 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

ARMY MEDICAL SCHOOL.

THE fiftieth session of the Army Medical School was opened at Netley on the 2nd inst. Forty-five surgeons on probation for the British army and five for the Indian army have joined. In consequence of the urgent need for medical officers, these gentlemen will only remain for two months instead of four, their places being taken by a second batch, who will join early in June and be dismissed in the beginning of August. The introductory address was delivered by Professor Aitken, F.R.S., who gave a philosophical lecture dealing with the application of the Darwinian hypothesis and the evolution of disease. The Director-General, Dr. Crawford, was present, and addressed some words of counsel to the surgeons on probation. Sir Joseph Fayrer, K.C.S.I., Surgeon-General Murray, Colonel Bell, and the officers of the school and hospital staffs were also present.

Several lady nurses from the Guards Hospital in London have left for Suez for duty with the Guards' field hospital at that place.

It having been decided to separate the duties of the medical administration of the troops stationed in the Home and Woolwich districts, which have hitherto been vested in one officer, Surgeon-General Sir James Hanbury, who was principal medical officer in Egypt during the campaign of 1882, takes over the medical charge of the Home district, and Brigade Surgeon T. Rudd that of the Woolwich district.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon Alfred Hubert Kelly, B.A., M.D., has been allowed to withdraw from Her Majesty's Naval Service, with a gratuity.

The following appointments have been made:—Staff Surgeon Edward E. Mahon, to the *Bacchante;* Staff Surgeon Herbert M. Ellis, to the *Sapphire;* Staff Surgeon Robert W. Williams, to the *Pegasus;* Surgeon H. G. Jacob, to the *Racer;* Surgeon J. M. Rogers, to the *Agincourt;* J. W. Grene, to be Surgeon and Agent at Crookhaven; Fleet Surgeon James Flanagan, to the *Cambridge;* Fleet Surgeon Garland W. L. Harrison, to the *Northumberland;* Surgeon Herbert W. G. Doyne, to the *Bacchante;* Surgeon James C. F. Whicher, to the *Agincourt;* Surgeon Henry G. T. Strickland, to the *Victor Emanuel;* and Surgeon J. D. Henwood, to Plymouth Hospital.

A trained naval sick-berth staff is being established, and boys, who will be medically examined as to fitness for the service, will be selected from Greenwich Hospital School, the mercantile marine, and other sources. After completing a year's service in a training ship they will be sent to Haslar Hospital, where they will receive instruction in elementary anatomy, bandaging, in dressing wounds, and such other exercises as will enable them to render first aid to the wounded afloat and ashore. After performing these preliminaries the candidates will undergo an examination, and if found qualified they will be rated as sick-berth attendants with Admiralty approval. A notice has also been published that, pending the introduction of the new scheme, a few young men, whose age is between eighteen and twenty years, will be trained as nurses. They will have, if fit for the duties, all the advantages of the new system.

Correspondence.

"Audi alteram partem."

"STRANGULATED OMENTAL HERNIA."

To the Editor of THE LANCET.

SIR,—Some time ago Mr. Rushton Parker published a short work on "Abdominal Hernia," in which he questioned the usual doctrine that the strangulation of omentum only in a hernia will produce the same symptoms (though possibly less severe) as are produced by strangulation of the intestine, and he repeated his views in your columns on May 17th, 1884. He called attention to the fact that in my work on the "Principles and Practice of Surgery" I had supported the usual teaching, although I thought it right to call attention to the circumstance that the ligature of the omentum produces no such symptoms. Mr. Parker believes that the old doctrine is erroneous, and that the symptoms, in cases where strangulation is believed to have occurred in herniæ, which are really epiploceles—i.e., purely omentum—are due either to obstruction resulting from the dragging of the omentum on the colon, or to peritonitis, or to purely functional obstruction of intestine due to some other cause, and unconnected with the epiplocele except by simultaniety of occurrence;[1] whilst he believes that there is another class of cases in which the hernia is not really omental only; but that a piece of bowel has been in the sac, but has somehow got reduced either during the operation, or by the taxis just before the operation. I replied to Mr. Parker's criticisms in a letter which you published on August 4th, 1883, in which I hesitated to accept the second hypothesis (that of the reduction of previously strangulated bowel). As, however, a case has lately occurred in my own practice showing the reality of the fact, I hasten to put it on record in justice to Mr. Parker, as well as in consideration of the interest of the surgical question itself.

The heads of my case are briefly these:—An old man (aged seventy-three) was admitted into St. George's Hospital during the night of March 19th for umbilical hernia, with constipation and vomiting. I was accidentally absent, and a colleague was called in, who saw no reason to interfere by operation. Nor did I when I saw the man next day. He had had the rupture for two years. Latterly he had had a bad cough, and the tumour had become larger. On the previous day, after a severe fit of coughing, he suddenly experienced great pain at the umbilicus, and increased swelling. He began to vomit soon afterwards. The vomiting, however, at first was almost entirely of the contents of the stomach, and seemed to be excited by his cough. I must not burden your space with all the particulars of the case. Gentle attempts were made to reduce the hernia, but with no effect, on March 20th, and I believe no serious effort at taxis was made on any subsequent occasion. The man went on in much the same way for three days; but then the vomit became obviously more "fæcal"—i.e., it was no longer from the stomach only but from the small intestines, and his strength began also to fail, so that it was clear that if not relieved he would die. At the same time, his chest was so full of rhonchi, and his heart's action so feeble, that I was unwilling to give an anæsthetic. On March 23rd the parts over the sac were frozen and divided, and the sac found tightly constricted. The stricture being freely divided, attempts were made to reduce the hernia; and these not succeeding, the sac was opened, and nothing found in it but congested omentum, which was removed after tying its stalk with a double catgut ligature. The vomiting continued, and the patient died eighteen hours afterwards. On post-mortem examination the omentum was found adherent, not to the neck of the sac, which was quite free, but to the parietal peritoneum *inside* the belly. The portion in the sac could not, therefore, have exerted any traction on the colon, nor was there any serious displacement or any loading of that portion of the bowel. But about four inches from the ring was found a knuckle of small intestine, which had obviously been recently strangulated, and is thus described by our curator, Mr. Shield:—"It was about two inches in length, congested, and claret coloured, and was terminated above and below by the dark narrow furrow, both discoloured and contracting the bowel, which is commonly seen in intestine reduced in hernia, and s unmistakable in appearance." The fresh appearance of he constrictions and the still congested condition of the bowel appear to me conclusive proof that the reduction of he constricted intestine must have taken place during the peration, eighteen hours before death, and not in the ttempts at taxis three days before.

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[1] Of this last view Mr. Parker gives an example in the accompanying letter.

The case proves beyond reasonable doubt that Mr. Parker s right in believing that some of these cases are not cases of ure epiplocele at all, and that I was wrong in thinking hat an experienced surgeon could not have reduced a small nuckle of bowel without being aware of the fact, or oticing an unoccupied portion of the sac from which the owel had been reduced. It does not, however, convince e of the truth of Mr. Parker's opinion, that strangulation f omentum only cannot produce the symptoms which I ave indicated, and I confess that I still hold the opinion ated in my book, in connexion with many other surgeons, ho also have met with cases inexplicable to their minds n any other way, difficult, as it may be, *to form a satisfactory theory* of the occurrence. At any rate, I thought it y duty to ask you for space to record this case.

I am, Sir, yours truly,
Great Cumberland-street, April 6th, 1885. T. HOLMES.

To the Editor of THE LANCET.

SIR,—Mr. Timothy Holmes has had the great kindness to t me see the copy of his letter, in which he makes very ndsome reference to me. Having myself found post-ortem evidence of previous intestinal replacement in fatal rangulated hernia that had been, or was capable of being, pposed to be mere epiplocele, I had the best grounds for lieving that a similar condition of things could occur ain. The combined circumstances that render this obsertion possible must be so rare that Mr. Holmes's independ nt confirmation lends to my contention a support without hich many would fail to be impressed by it. After all, owever, his case, like the one I referred to, merely shows how, a certain rare, but always possible, class of cases, to avoid e fallacy of attributing to strangulated *omentum* symoms really caused by strangulated intestine. I continue shaken in the firm conviction that strangulation of entum alone, *as* strangulation, can have no symptoms, eing that the tightest ligature never produces them. nong the various explanations that can be given of the doubted symptoms that are found in cases where omentum one exists, and is supposed to be strangulated, I mentioned e occurrence of intestinal obstruction of the "*functional*" nd in persons who happen to also have an omental, though rmless, hernia. It is not a very uncommon thing to eet with patients who suffer from constipation, vomiting, griping, or vague abdominal distress. Such cases are remedied by fasting, by rest and warmth, and by the narcotic assistance of opium, alcohol, or both. In my pamphlet on "Abdominal Hernia" I asked, "Why such symptoms should not now and then occur to persons already possessed of a hernia?" They are, in fact, perfectly well known in old large herniæ, especially umbilical; and although the hernia of intestine is often, if not generally, at fault, even if not strangulated, by being materially hampered through adhesions, &c., still such symptoms have often nothing whatever to do with the hernia. It must be so, for surely persons do not require a hernia in order to get "bowel complaint," whether it be diarrhœa, constipation, or mild obstruction. Such being the case, it is contrary to common sense and clinical experience to put down such symptoms at once, and in every case, to the supposed strangulation of a previously long harmless omental hernia. Such a case I, not long ago, witnessed. On Dec. 22nd, 1884, I saw, in consultation with Mr. H. O. Thomas, an old lady of nearly seventy who had long had an irreducible omental femoral hernia. For two or three days previously she had had constipation, vomiting, furred tongue, loss of appetite, griping, and general abdominal distress. The hernia, moreover, had increased in size, but whatever its contents, it was not resonant on percussion. Taxis was very gently attempted under an anæsthetic, as well as without, but the hernia could not be in the least altered in bulk or shape. The case we both admitted to be consistent with the existence of functional obstruction of intestine, independently of the hernia; yet, knowing how insidiously strangulation of intestine occurs, without much addition to the hernial bulk, I felt that operation would be the wiser course to make sure. But Mr. Thomas rather held to the view that the hernia was not in this case in fault. So after ample discussion I agreed to his proposal to trocar the centre of the hernia for exploratory purposes. The only issue was blood-stained serum, without odour at all, on which it was agreed that we had not reached intestine and that the patient could fairly be left to medical treatment. A little morphia was given under the skin and the mouth merely moistened with necessary liquid, the result being entire cessation of symptoms and speedy recovery. Cases like this show that the whole casuistry of the subject is rather more intricate than is often imagined, and prove more and more how well founded is the very reasonable rejection of the doctrine assigning symptoms to mere strangulation of only omentum. It has occurred to me while writing that some might think that a portion of intestine was possibly here reduced in the manipulations. This is not possible; we were keenly on the look out for any such fact, which would have been welcomed, and could not under the circumstances have eluded observation. No change whatever in the bulk of the hernia resulted until it was tapped. A similar case is recorded by Mr. Thomas at the end of his work on intestinal obstruction, but the above is the first that I have myself recognised. Pray excuse the length to which I have gone.

I am, Sir, yours truly,
Rodney-street, Liverpool, April 6th, 1885. RUSHTON PARKER.

"SMALL-POX AND VACCINATION."

To the Editor of THE LANCET.

SIR,—In your last week's notes in Parliament, at p. 643, it is not made clear that the seventy-eight persons engaged at the London small-pox hospitals, about 7 per cent. of the whole number employed, who had had small-pox had it before they were engaged at those *hospitals*. When Mr. G. Russell from his official position had to state that his department had no reason to *doubt that* "none of the nurses at any of the London small-pox hospitals who had been *duly vaccinated before entering on their duties* have ever caught small-pox" is substantially accurate, he goes on to say that this might have been more guardedly expressed in "Facts concerning Vaccination." The words now put in italics show how sufficiently the expression is guarded, and most members of the Local Government Board would probably admit this.

Of late it has been common to report cases of small-pox after vaccination, not only when the vaccination was performed after the reception of small-pox infection, but also where there is no evidence of any effect of revaccination having been produced. In times of great pressure persons have been engaged for duty at small-pox hospitals before their revaccination *was* known to be effective. Even a previous attack of small-pox is not a positive safeguard unless tested by a revaccination. All the evidence accumulated to the present time conclusively proves that vaccination has lost none of its protective power, and we are constantly reminded to our cost that small-pox has lost none of its virulence.

I am, Sir, your obedient servant,

April 4th, 1885. WILLIAM SQUIRE, M.D., F.R.C.P.

DONBAVAN v. MORRISON.

To the Editor of THE LANCET.

SIR,—The above case came on for trial before the judge of the county court, Croydon, on the 31st ult. After all the points on which we relied had been ably put forward I regret to state that the judge, without calling on the defendant's counsel for reply, gave judgment in his favour, giving costs also on the higher scale, alleging as the grounds for his decision that he held that a workhouse and workhouse infirmary were public institutions within the meaning of the 5th section of the Coroners' Witnesses Act, and that the officers of such institutions were not entitled to payment for making post-mortems and attending and giving evidence; thereupon our solicitor applied for leave to appeal, which the judge, after some hesitation, assented to.

This decision, if not upset on appeal, will seriously affect the interests of all workhouse medical officers, who in future will not be paid for such examinations and evidence, and it practically reverses the system that has been followed since the Act came into force, which has been to pay workhouse medical officers for such examinations and evidence.

The trial so far will cause a heavy drain on the very limited income of our Association, and without immediate pecuniary assistance it will be impossible for us to prosecute further proceedings. May I ask, therefore, my professional brethren who are able and willing to at once announce their intention of supporting us by forwarding subscriptions to me. I am, Sir, yours obediently,

JOSEPH ROGERS,
Chairman of Council, Poor-law Medical Officers' Association.

31, Montague-place, W.C., April 1st, 1885.

"ALLEGED DEATH FROM VACCINATION."

To the Editor of THE LANCET.

SIR,—After reading your article I feel it due to myself, being misunderstood, to say:—1. That I accept, and have for twenty years accepted, the proposition that vaccination modifies small-pox. 2. I do not consider "arm-to-arm vaccination an undesirable method of procedure," except in the case of tuberculous infants. 3. I was called urgently, for the first time, on the 14th ult., to the deceased infant, H. J. Downing Walker, because the child was "in a fit." The difficulty in breathing spoken of in Court by Mrs. Walker was on the 12th ult. Any observations made in Court as to the effect of point vaccination as compared with arm-to-arm vaccination were given only as the result of my own individual experience. Finally, in the certificate, which the superior wisdom of a coroner's jury was pleased to condemn, it was my intention to state, according to my light, the prominent medical facts preceding death, and that being so, the certificate, when written, was a "correct statement" of the opinion of

Your obedient servant,

Regent's-park, N.W., April 6th, 1885. C. C. WHITEFOORD.

AN EASY METHOD OF CURE FOR SALIVARY FISTULA.

To the Editor of THE LANCET.

SIR,—The following method does not appear to be mentioned in any of the usual text-books of surgery:—

J. K——, a fish salesman, came to me about the New Year with a fistula of the parotid duct resulting from a former knife wound. The flow of saliva was continuous, but was much aggravated at meals, and when opening oysters in the course of his business. Applications of nitrate of silver, pure nitric acid and a hot wire were tried without success, as all communication with the mouth seemed shut off. On Jan. 20th two needles threaded on one fairly strong piece of silk were successively passed through the fistula into the mouth on a rather lower level than the external fistulous orifice, piercing the buccal mucous membrane about a quarter of an inch apart. The needles were then removed, and the threads firmly tied and cut off short, thus leaving a ligature enclosing part of the internal wall of the duct, a portion of mucous membrane, and the intervening structures, but in no way preventing the healing of the external wound, as would be done by the seton usually recommended. The edges of the fistula were touched with pure nitric acid on Jan. 22nd, and some swelling of the side of the face ensued. On Jan. 25th a scab had formed outside, and nearly all the saliva found its way into the mouth. This scab came off a few days later, leaving the skin soundly healed, and the ligature inside cut its way through the mucous membrane on Feb. 11th, since which time the man has experienced nothing differing from the normal condition.

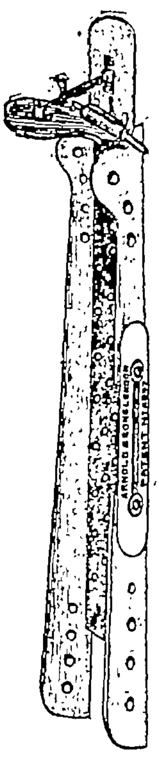
I am, Sir, yours faithfully,

Rochdale, April 6th, 1885. ALFRED HODGSON, M.B. Aber.

IMPROVED FRACTURE BOX.

To the Editor of THE LANCET.

SIR,—I wish to bring under your notice a new invention, which I presume will be of great advantage to surgeons in the treatment of fractures of the leg. It is an improved fracture box, suitable for any fracture of the leg, simple or compound, or disease of the ankle-joint requiring rest in position. It consists of three pieces: bottom and two sides. The bottom is pierced with drainage holes, and has a hinged foot-plate attached. This foot-plate is further connected to the foot end of the bottom splint by a regulating screw. This screw is a "fine thread" screwed socket rotating on a screwed pin. This screw regulates the angle at which the foot-plate is required to be kept. One of the side splints is plain; the other is in two parts, kept together by a brass slide having a longitudinal slot of the diameter of the thumb-screws, on which it runs, and which serve to retain it in position. This is the "interrupted" splint of the fracture box. It can be made a plain splint if required, or can be fixed at any divergence by the thumb-screws. One of these interrupted splints is only required, as both side splints are reversible, and will fit either side of the apparatus. The usual straps and buckles tie it together. The accompanying woodcut will assist in giving a clear idea of the nature and construction of the apparatus.



I remain, Sir, yours sincerely,

JAMES J. FOLEY,
Medical Officer, Midleton Hosp.

Riversdale, Midleton, co. Cork,
April, 1885.

NEW WORKHOUSE INFIRMARY AT WEST BRO-WICH.—The *Building News* gives a lithograph of the Ne Infirmary, West Bromwich. Accommodation is provid for 224 patients. The arrangement of the wards is on th pavilion system. The contagious and infectious are separated from the buildings, and so arranged that ea ward may be isolated. None of the buildings exceed t storeys. The staircases are of stone, and ...... T hydrants have been placed in convenient positions. T cost of the infirmary has been about £12,500.

WITH THE TROOPS IN THE SOUDAN.

(From our Special Correspondent.)

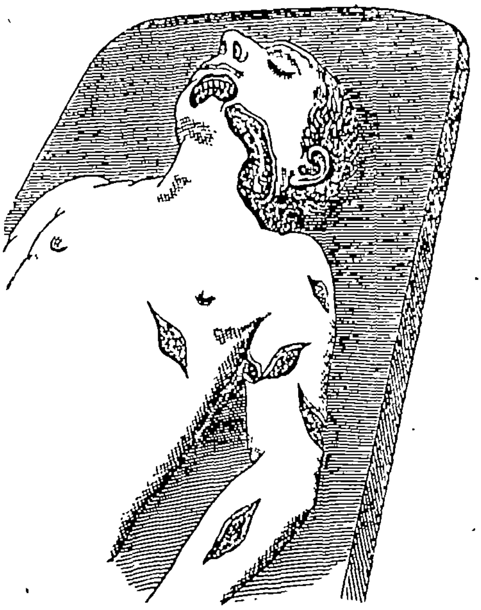
Base Hospital, Camp near Suakim, March 23rd, 1885.

Footsore, *dust-begrimed, and desperately tired, I sit* down to write you a few lines from this entrenched spot, as I feel assured any information from the front, however brief, will be welcome from this newly selected battle-field of the African Soudan. Scarcely had I arrived in this port ere *private news reached me of a projected advance of our* troops in the direction of Tamai, *en route* for Berber. I at once proceeded on foot under a blazing sun to the head-quarters of our camp, situate about a mile from the Arab town, and sought an interview with General Graham, now in command of the troops out here. On inspecting my papers, however (your certificate of appointment as "special" I refer to), he remarked *that* my credentials were not exactly in order, and explained to me that a properly attested registration certificate should have been obtained from the proper authorities at the Horse Guards, in order to place me on the same footing as other specials accompanying the troops in the field. I explained how hurried my departure had been from England, and after a few minutes' conversation the difficulty seemed *to* be bridged over, and a very pleasant interview terminated in the Chief of the Staff pointing out the principal *medical* officer's tent, and referring me to that gentleman for any future instructions for my guidance on the subject. Surgeon-General Barnett at once received me in a most cordial manner, expressed his pleasure at meeting a *repre*sentative of The Lancet, and assured me that no ob*stacle whatever would* be placed in my way, but every facility possible afforded for my obtaining any medical *or* surgical records of such cases as I thought fit to notice, and were likely *to interest* the profession at large, at the same time handing me a paper (a general order) for my perusal, whereby I was enabled at a glance to ascertain that a very careful disposal of the medical staff had already been made in view of the troops moving westward to confront and give battle to the enemy in the plain.

On Thursday *morning* last, March 19th, I was aroused at A.M. Hurriedly dressing, partaking of biscuit and a good cup of strong coffee, and then filling my small handbag with tourniquet, some artery forceps, surgical needles, silk, and such other *necessaries likely* to be *useful*, as well as comforting in case of accident or delay on the road, I quitted the easy quarters on board the steamship *Arab*, and proceeded on shore in company with a "special" bent on a representative errand as myself. On arriving at headquarters, we found the column *had left the camp about* an hour before our arrival, and not being able to secure a horse for myself, I *had to part* company with my companion and follow General Graham's force to Asheen on foot and alone—a by no means happy prospect, in view of a *some seven or* eight miles' dusty walk over a sandy desert under the scorching rays of a tropical *sun*, and in the *presence of a subtle*, active, and relentless foe. By the time the sun had risen, a light, cool, northerly breeze had sprung up, so that my solitary tramp turned out not quite so unpleasant a one as I expected it would have been. Doing my level best, as they say—some five miles an hour,—I came up with the rearmost of the camel train, in charge of native Indian drivers, and in an hour afterwards I had forged so far ahead that I could easily discern the entire distribution of the force in front, and at two hours from the time of leaving the ship was up with and coming on at a canter with the Brigade of Guards, and felt not much the worse for my long walk. Soon afterwards a halt in front, and an order from the General for *the camels and mules to immediately* come into square, suggested the probability of a "find," either for *refreshment* or foe. "Breakfast, I guess," says a sturdy mule-driver close to me, the wish *on his part* being father to the thought, as our stomachs were by this time empty *enough*. Not long, *however*, had we to wait for a decision on this point. An extended line of *white-greyish* smoke making its appearance over the helmets of the men standing in *front of* us, *and the sharp* rattle of musketry heard on our left front face told no uncertain tale, but *proclaimed the fact* that the enemy were there—more than that, not at bay, but, as their usual custom *and valour* is, were charging right up to our very front. Cavalry, with their gaily decorated *lances*, were seen dashing along in one direction, whilst our Guards, the 49th, 53rd, and 70th, were doing their very best pegging away in another. The din of battle proceeded, whilst dust and smoke soon obscured from view nearly everything going on around us. After quitting the camel convoy I had marched on with the Guards, and then joined the *hospital* and bearer company, hoping to see what wounded were brought in from our front face of the square; but in the hurry and *scurry, the confusion and rapidity of movements* going on around me, I for a time lost touch of the medical department, and, by getting out of the way of a score or so *of refractory camels, suddenly discovered myself outside* of the square that had fortunately, and yet quickly, been formed at the base of a small hill to resist the onslaught of a most brave, active, and determined enemy. *For some* seconds I was at a loss to know what to do. There I stood alone, unattached, and withal perfectly unarmed. I felt *for at least once in my life that I had outstepped the bounds* of discretion, and had really no business where I was, and further than that, if I remained much longer just at that particular *spot looking* at the action, and admiring the pluck as well as the dash of our own brave fellows in mounting the spur of the hillock, and carrying up planks and bags to form a *zereba*, the occasional thinning of the dust cloud and blowing away of the smoke giving me an opportunity now and then of getting a glimpse of what was going on in this tug of war, I myself would be as near as possible in a line betwixt two fires, and form an admirable *target* for either side which should choose to fire upon me. I was in a dilemma, it is true, having to determine upon one of two dangerous alternatives—either to dash back through the dust and smoke and try to regain the inside of the Guards' square, with the prospect of being mistaken and shot at as an enemy, or make for some safe distance in the rear. Acting on a natural instinct, impulse if you will, and which has stood my friend on many a trying occasion before, I decided for the latter, and at noon exactly started across the plain *for* Suakim, and the entrenched camp some seven miles away. Two young men, who had come out with the force in the morning, joined me a few minutes afterwards, and I at *once* felt relieved by their companionship in this retrograde movement on our parts; however, they, like myself, were amateurs, and had come out of camp—just as Easter Monday holiday folk do on Brighton Downs to see what was going on; and one of them had in his possession a large, ugly revolver, which he persisted in carrying in his hand at full cock. As I considered there might possibly be, from inexperience in its use on his part, more danger in this friend than in a foe, it was with no small degree of relief to my feelings that we three parted company, having reached a place of comparative safety about four miles away from the action that was then going on. By 2 P.M. I was inside the West Redoubt, the furthest post out held by the English in the plain, and learnt from the officer in charge, Lieut. the Hon. H. White of the Guards, the great danger I had run in going out, and especially in coming in unarmed over a wide plain that might then actually be in possession of the enemy, who give no quarter, but slaughter every man and beast they meet. *From* the crow's nest of this redoubt we watched the fight going on; saw that the brave British force had already secured the low hills which dominated the wells; but had formed a zereba as well as established heliographic communication between head-quarters and themselves. By three o'clock the fight was practically over. The gallant 70th were left to hold the zereba, and the remainder of the expeditionary force returned to camp to give the men a good meal, and get a little rest in their entrenched position after a most fatiguing march out, and the gallant exploits of the day.

Poor Lieutenant Dalliston, of the Guards, fell early in the day, shot dead, and very soon afterwards Surgeon Lane, also of the Guards, as gallant a fellow as ever breathed, and as *accomplished* a young surgeon as ever graced the pages of the Army List, sank to earth pierced by *a bullet* wound through his left lung. He was very carefully brought back to camp; *considerable* hæmorrhage meanwhile ensued, and all felt that his wound was desperately dangerous. The following morning he was dying, no possible hopes whatever being entertained that he *could live out the day*. He breathed his last about two o'clock in the afternoon. *Every* care and attention was paid him by his medical brethren, but all to no purpose. He passed away in the prime of life and pride of manhood, to give place for others to emulate him in quality and action, as well as to place another lasting testimony on the record of fame that there are men in the non-combatant as well as the combatant branch who are prepared to lay down even their lives, if needs be, in the execution of their duty for their Queen and their country. I had telegraphed to you early in the day of the serious character of his wounds, as well as that of some other officers; but from some misunderstanding on the part of the telegraphic company, all messages now being under a military censorship prior to being sent away, my report, containing ciphers to save expense, was stopped, and handed back to me in consequence.

Our list of casualties in this slight action, and the day day following, when a relieving column was despatched to the zereba, was heavy enough. Sergeant-Major Nicholls was stabbed to death, and some men of the 2nd Scots, 1st Coldstream, and 2nd Grenadier Guards fell mortally wounded by Remington bullets. Major Robertson, of the Bengal Cavalry, was stabbed by a spear very severely. Major Harvey, of the 5th Lancers, received a bad thrust through his left thigh, but is doing well. Most of the wounds were gunshot ones, the rebels not getting within thirty yards of our squares. The injuries inflicted by spear thrusts are simple clean flesh-cuts, the enemy's weapon having a razor-like edge. These wounds under ordinary antiseptic dressing do well, and generally heal by first intention. Their large double-edged sword, used with great force, held in the two hands, and generally aimed at the neck and head, produces most ghastly wounds, severing flesh, vessels, and bones in the course of its descent, and killing its victim outright. No man unhorsed in fight ever escapes the fury of these ruffians, nor lives to tell the tale of a hand-to-hand encounter with their active and brave but relentless, foes. (*Vide* sketch.)



Corpse of a private after falling into the hands of the enemy. One sword-wound in the neck, severing everything through the cervical vertebræ; the rest are spear-wounds on the chest and arm, six in number. (Sketched at Base Hospital, March 23rd, 1885.)

Saturday (21st) was a quiet day as far as the home force was concerned; but much firing was heard in the direction of the Hasheen zereba, although no reports had come in from them until Sunday, the 22nd.

On Sunday (22nd) a large force left the camp before daylight, taking a southerly direction towards Tamai, twelve miles distant. Five or six miles out, the camp, whilst the men were building a zereba, was surprised by a large number of the enemy, and a regular stampede among the camels and camp followers in consequence ensued. The details of this affair must sooner or later reach England, and some explanation will be required to account for the sad loss of life that has taken place amongst the troops and men employed. As I write this an order has reached the Base Hospital from headquarters for the medical staff to be in readiness to receive a large number of wounded from the field. A large and powerful escort has gone out to bring the wounded in. During the whole of this day (Monday, 23rd) Brigade-Surgeon Hinde, assisted by his energetic staff at the redoubt, have been working hard to have everything in readiness to receive them. About 100 are expected. In this camp Surgeon-Major Tanner can accommodate 70 in beds, 20 can be taken in the Auxiliary Hospital at Quarantine Island, whilst 55 could be removed on board the *Ganges*.

The hospital tents are both roomy and airy, being lined with double protective covering overhead, and are square, not bell-shaped, as wrongly described by some correspondent. The operating tent, under the superintendence of Surgeon-Major Tobin, is a picture of comfort, method, and order, and reflects much credit on the indefatigable officer in charge of it.

7 P.M.—Just dusk, and the wounded are being brought in. Poor fellows, I pity them indeed! Their faces, and those of the gallant band who have brought them, are so brown and covered with dust that they are scarcely recognisable; but never mind—comforts, in the shape of a nice bed, good warm soup, hot tea, or even brandy-and-water, await each one, as the necessity of his case demands it. The dressings, moreover, are so carefully adjusted, and the patients seem to have had such good attention in the field, that they will enjoy the comfort of a quiet night before their wounds are further inquired into.

LIVERPOOL.

(*From our own Correspondent.*)

MEDICAL FACULTY, UNIVERSITY COLLEGE.

THE vacancy caused by the resignation of Dr. Ewing Whittle, of the chair of Medical Jurisprudence and Public Hygiene, has been filled by the election of Mr. Frank T. Paul, surgeon to the Royal Southern Hospital, and surgical tutor in University College. Mr. Paul possesses eminent qualifications for the chair, having been a pupil of the late Dr. Alfred Swayne Taylor at Guy's Hospital, and having also held the appointment of pathologist to the Liverpool Royal Infirmary, where he was previously resident medical officer for nearly three years. He has personally made upwards of 1000 post-mortem examinations, and was for some time demonstrator of physiology. Altogether, the appointment is one on which the College may be congratulated.

THE LOCK HOSPITAL: COMPARATIVE RARITY OF SYPHILITIC IRITIS.

At a recent meeting of the Medical Institution, Dr. Bernard, surgeon to the Lock Hospital, read a paper on "The Treatment of Constitutional Syphilis," in which he remarked on the rarity of cases of syphilitic iritis seen in the hospital. The total number of patients treated averages over 600 annually, of whom the larger proportion are suffering from constitutional syphilis. Mr. Shears, senior assistant-surgeon to the Eye and Ear Infirmary, who took part in the subsequent discussion, observed that syphilitic iritis was very frequent among the out-patients of that institution. Subsequent inquiries showed that in a period of ten years (May, 1875, to March, 1885) there had been only seventeen cases observed in the Lock Hospital, and in the majority of these the eye is affected either on admission or very shortly afterwards. A very probable explanation is that the cases seen at the Eye and Ear Infirmary are those of patients who have neglected the primary disease, the influence of mercurial treatment in both preventing and curing syphilitic diseases of the eye in particular, being now undisputed.

STREET NOISES.

For some years past most of our leading thoroughfares have become insufferably noisy, there being an incessant roar of traffic from a very early hour in the morning until very late at night. The wood pavement does not appear to find much favour with the local authorities, who have only permitted a very limited use of it in the neighbourhood of the Northern Hospital, in Bold-street and part of Church-street, thoroughfares devoted to fashion. The asphalte pavement deadens the sound somewhat, though it has the disadvantage of being very dusty. Medical practitioners, who are obliged to live in or near leading thoroughfares, suffer much from this annoyance, as also from much noise which might be avoided, such as street music and singing, newsvendors' cries, &c. A recent local Act, which does not appear to be generally known (Liverpool Improvement Act, 1883), contains a section (29) which requires every street musician or singer to depart from the neighbourhood and from within hearing of any householders on being requested to do so by the latter, or any member of his family, or servant, or by any constable. A refusal to comply with this perfectly reasonable request renders the offender liable to a penalty of 40*s*.

CITY CHURCHYARDS.

This city contains within its corporate boundaries a large number of intra-mural churchyards and cemeteries which, since the year 1854, have been closed absolutely against all interments. Their appearance, until very recently, has been dismal in the extreme, presenting a dreary outlook of neglected graves and tombstones, while some have been made the receptacle for all the refuse of the adjoining street. Some years ago the incumbent of St. James's Church, Toxteth-park, the churchyard of which was in a most disgraceful condition, took steps to improve it, including the planting of trees. The experiment has proved both successful and contagious, other churchyards and cemeteries having been planted with trees and made into recreation-grounds. Another churchyard, St. Luke's, is now being laid out; and it is probable that in the course of years every intra-mural burial-ground will have been similarly transformed. This will conduce greatly to the health and comfort of the inhabitants in their neighbourhood.

THE ROYAL SOUTHERN HOSPITAL.

At the Royal Southern Hospital there are several cases of operation for the removal of new growths, under the care of Mr. Paul. A recurrent melanotic sarcoma of the neck, primary in a submaxillary gland, is worthy of note. The original growth was removed two years ago from a man aged forty-eight; he has since been in good health, but the recurrence was very extensive and deep, so that, although the wound is healing well, the ultimate prospect is not encouraging. Among the most interesting are two cases of carcinoma of the *antrum*, involving removal of the whole of the upper jaw and contents of the orbit. Mr. Paul refers to six cases of this nature which he has recently met with, all of them presenting the same clinical history, and one which enables the diagnosis from sarcoma to be made without reference to the microscope. In all, the first symptom noticed by the patient was a formation high up in the nostril on one side, which easily bled and gave rise usually to some unpleasant discharge; subsequently, at the inner angle of the orbit, a small soft tumour grew, displacing the eye, and this was the immediate cause of the patient's applying for admission to hospital. In no case was the antrum distended, as in sarcoma. The growth evidently began in the mucous membrane of the antrum, fungated into the nostril, and then spread up, probably along the nasal duct, to the inner angle of the orbit. Microscopically, two of the cases were of the ordinary squamous epithelioma, and the remaining four the normal cylindrical-celled carcinoma of this part. Both the patients have recovered temporarily from this extensive operation, but one already has a recurrence. An *epithelioma of the back* is another case not very common; and two old cases, come up to show themselves in good health, were encouraging—one, an excision of the rectum for cylindrical epithelioma nearly four years ago, still free; the other, a colotomy for the same growth in the sigmoid flexure of the colon six months ago. Mr. Paul has two cases of compound fracture of the leg into the ankle-joint, in which very good results have been obtained by treatment with his splint and wiring the bones; and two or three cases of talipes, in his splints, undergoing a gradual improvement.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

HEALTH LECTURES AT MORPETH.

A COURSE of six lectures of a popular nature has been commenced at Morpeth, and it is satisfactory to know that the public have taken a considerable interest in the matter, as evinced by an attendance which is said to have fully tested the capacity of the Town Hall. A few years ago a popular lecture by one of our professional brethren was a rare event in the North, and only "the leading men" ventured to address the public, and then on non-professional subjects as a rule. Now the younger members come forth, to the great advantage of the public, who desire, and will have, medical information and light on sanitary subjects. The first lecture was by Dr. David Drummond of Newcastle, and his subject, "House Sanitation," was ably treated, dwelling with force and lucidity on the importance of ventilation and drainage, and giving a number of very striking illustrations of how such diseases as scarlet and typhus fevers and consumption were generated by neglect of the principles laid down. The second lecture was given by Dr. Byrom Bramwell of Edinburgh (whom we claim here as a Tynesider); his subject, "Common Diseases, their Cause and Prevention," was very ably treated, and the Hall, if possible, was more crowded than on the former occasion. It is as well to mention, as bearing on the success of these sanitary lectures, that the experiment was tried, which has proved so successful, of charging one penny for admission to each lecture. This has been shown to be a better plan than free admission; for what people get for *nothing* they generally attach little or no value to.

THE CHLORAL HABIT.

A very distressing case has occurred in Durham City since my last letter. A lady, the wife of a prominent citizen, was found dead in her bed. It was stated at the inquest that she suffered from sleeplessness, for which she was in the habit of taking chloral without medical advice, and it was shown that death had taken place "from syncope, accelerated by chloral, self-administered."

AN EXAMPLE FOR TRAVELLERS IN SUNNY LANDS.

Sir George Elliott, Bart., M.P., has sent large boxes of beautiful flowers from the south of France to Durham County Hospital, Sunderland Infirmary, and Newcastle Infirmary, with instructions that they should be dispersed amongst the sick wards. Sir George has frequently shown his sympathy with the sick poor of the north before, but I venture to say this last act of his will be felt by them as most graceful and considerate.

MEASLES AND RÖTHELN IN THE NORTH.

There is now rather a smart epidemic of measles prevalent at Gateshead. I have heard of as many as forty pupils in one school being absent from this cause. Several adults have been attacked, and, as usually observed, have suffered more severely than children. Some cases have been evidently of the character of rötheln; but as a rule the epidemic has not shown the severity nor the fatality of the Sunderland outbreak, which, I regret to say, still prevails in a bad form in that borough.

TRIPLETS IN THE NORTH.

Since the New Year set in several cases of triple births have occurred in the north, both sides of the Tyne having received augmentation to their population in this way, and also some of the mining districts of Northumberland. If we suppose that the usual midwifery statistics are correct as showing triple births to take place once to every 6000 cases, we must allow that the experience of Mr. John Foggin, a young surgeon in practice here, has been quite unusual, for many practitioners will not have a case of triplets in a lifetime, while Mr. Foggin has had a case on January 8th last, two boys and a girl born alive; and again on March 28th, three boys born alive, and still living. I believe Mr. Foggin has been successful in obtaining the Royal Bounty for the first case, and is also hopeful of getting it for the last; both have occurred in the wives of poor and industrious people.

Newcastle-on-Tyne, April 6th.

PARIS.

(*From our Paris Correspondent.*)

THE SUSPECTED ARSENICAL POISONING CASE.

IN my letter of Jan. 31st I gave an account of a suspected case of poisoning by arsenic. The supposed criminal, whose name is Pel, and a clockmaker by trade, is soon to appear before the Court of Assizes of the Seine. The trial promises to be most interesting, and at the same time most perplexing, as the preliminary examination has been before the magistrates and medical jurists. Owing to the mysterious disappearance of the maid-servant of the accused man, a stove in which he is strongly suspected of having burnt the body of his victim, or perhaps victims, was seized; but as the dimensions appeared somewhat too small for the execution of his purpose, the medical experts had one made exactly like it, and by way of experiment burnt the corpse of a human adult in it. They were greatly surprised at the rapidity and completeness with which the body (previously cut up) was consumed. In fact, it might be used as a crematory. That belonging to the accused, which was rather primitive and unique of its kind, is supposed to have been devised by himself, and has been carefully preserved in the same condition as when found, as it will necessarily be brought forth as evidence against him. Although very small, yet the mouth of the stove was found large enough to admit a man's head, entire. It has also been noted that Pel followed very assiduously, and for a long time, the course of Medical Jurisprudence delivered by Professor Brouardel at the Morgue. Another crushing circumstance against the accused is that when the examining magistrate observed to him that arsenic was found in the body of his first wife, which was exhumed, he replied that that was not astonishing, as she had been treated for two years with arsenic; but it has been ascertained that none of the medical men who attended her had prescribed that substance, nor did any of the prescriptions made up at the pharmacies for her contain it.

REMOVAL OF A CANCEROUS KIDNEY.

Dr. Péan, one of the most daring French surgeons of the day, and a well-known ovariotomist, submitted to the Academy of Medicine last week the case of a patient (an English lady) from whom he had removed a cancerous kidney about fourteen months ago. Dr. Péan had seen the patient six years previously, but he did not then consider the case ready for any operative measure. She had in the interim consulted some of the most eminent surgeons in London, who declared, in response to her desire for an operation, that it was impracticable. She then came to Paris to consult Dr. Péan again, and when he saw her about fourteen months ago, he found her in the last stage of marasmus, and the tumour occupied as much of the abdomen as would a nine months' gravid uterus. The removal of the tumour was decided upon by gastrotomy, and the operation was effected by making an incision through the abdominal walls, along the linea alba from the pubes up to the epigastric region. The tumour was removed with some difficulty, and was found to weigh six kilogrammes, or about thirteen pounds, and the whole operation occupied a little more than an hour. It is, however, a pity that Dr. Péan did not mention whether the operation was performed under the influence of chloroform or other anæsthetic, or whether antiseptics were employed or not. Professor Charles Robin, who examined the tumour histologically, pronounced it to be an epithelioma of the kidney. Dr. Péan stated that, although the operation was performed about fourteen months ago, he did not then wish to submit the case to the Academy, as he was afraid of an early relapse. This, however, has not occurred; the general state of the patient has never failed to improve from the commencement, and the remaining kidney has been found sufficient to produce the normal quantity of urine. The urine of the patient was lately examined by M. Méhu, an eminent chemist, who declared that it was of the same chemical and histological constitution as that of women in health.

THE HEALTH OF THE ARCHBISHOP OF PARIS.

The Archbishop of Paris, who was reported to be suffering from bronchial catarrh, is now officially pronounced by his medical attendant to be out of danger, and notwithstanding his advanced age (his Eminence being an octogenarian), every hope is entertained of his recovery.

Paris, April 7th.

ANONYMOUS letters containing threats to blow up Netley Hospital with dynamite have recently been received by the Commandant and other officials of that institution. A few nights ago a package, which was immediately destroyed, was found in the vicinity of the hospital, and since then increased vigilance has been shown, and the force of military police stationed at the hospital has been increased.

THE ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council, held on Thursday last, the minutes of the last meeting were confirmed.

The thanks of the Council were given to Mrs. Fairlie Clarke for the presentation of drawings, &c., illustrating Diseases of the Tongue, which had been prepared by her late husband.

No essay was received for the Jacksonian Prize. The subject for next year is to be the Pathology, Diagnosis, and Surgical Treatment of Diseases of the Thyroid Gland.

Mr. E. H. Fenwick, of the London Hospital, was elected an Examiner in Physiology under the combined scheme.

The Committee of Charters and Bye-laws presented their report, the reproduction of which we must defer till next week. It was agreed that the Association of Fellows and Members be informed that the College is about to proceed to get the necessary charters and bye-laws drawn up.

The question of recognition by the College of the vaccination certificates granted at Belfast, having been again raised by a letter from Professor Redfern, was referred to a select committee.

A request from the Western University, London, Ontario, to have its teaching recognised, was referred to a committee of management of the two Colleges.

Mr. Durham gave notice of the following motion, to be brought forward at the next meeting of the Council: "That seven delegates from this College be appointed, with authority to invite an equal number of delegates from the Royal College of Physicians, to meet and confer upon what steps, if any, can be taken to enable the two Colleges to obtain the legal right of giving the title of Doctor to persons who shall have obtained the licence of the Royal College of Physicians of London, and the diploma of Member of the Royal College of Surgeons of England."

MAHOMED MEMORIAL FUND.

THE following additional subscriptions have been received:—

	£	s.	d.		£	s.	d.
Dr. Edward Chisholme (Sydney)	5	0	0	Albert Martin, Esq., M.B.	5	0	0
Dr. Arthur Evershed ...	1	1	0	T. D. Ransford, Esq. ...	1	1	0
H. Lund, Esq.	1	1	0	A. H. Tubby, Esq.	2	2	0

A meeting of the General Committee will be held in the Governors' Court-room, Guy's Hospital, on Thursday, April 16th, at 4.30 P.M., to receive the report of the Executive Subcommittee, and to consider how best to make use of the fund.

ARTHUR E. DURHAM, Treasurer.
JAMES F. GOODHART, } Secretaries.
W. H. A. JACOBSON, }

COUNTY COURT, CROYDON.

MEDICAL FEES FOR NECROPSIES IN WORKHOUSES.

In re DONBAVAN *v.* MORRISON.

MR. W. J. FRASER, who appeared for the plaintiff, having stated the facts, contended that it formed no part of the duty of the medical officer of the Croydon Wc and Infirmary to make a post-mortem examination of the deceased's body. The case was properly reported to the coroner's officer, who, having deemed an inquiry after consulting the coroner, the medical officer not being certain as to the actual cause of death, was ordered by the coroner to make a post-mortem. It was no part of such medical officer's duty to make such examination at the coroner's request. He was not remunerated for it. I prior to the appointment of the present (recently elected) coroner, his predecessor, Mr. Carter, had for years paid the fee. The workhouse and infirmary were not public tions within the meaning of the Act. They were exclus maintained at the expense of the ratepayers of the union and were for destitute persons and none others. Unl person was destitute, or in fact a pauper, there was no rig whatever on the part of such person to receive therein. No person could be treated in a workhouse infirmary without becoming a pauper. The plaintiff was therefore the medical officer of a pauper, and not of a public institution. A coroner had no more right to call upon the medical officer of a workhouse to make a post-mortem without paying the stipulated fee than he had to require the ordinary medical practitioner to do so, who might have been casually called in to attend upon a person upon whose body an inquest had to be held, and also a post-mortem. A public hospital or infirmary was an institution open for the reception of any person, no matter what might be his or her rank in society who sought its aid and could be cured therein. The word "public" was general in its application, and applied to all classes of persons, whereas a workhouse and infirmary was only for the pauper and no other. The word "public" meant public generally, and not any section such as the destitute and the pauper. In conclusion, Mr. Fraser saw that, whether the object for which the statute was passed, the mischief at which was aimed, the plain and natural interpretation of the language used, or the fact that workhouses were not mentioned or even referred to, was regarded, no other conclusion could be come to other than that the plaintiff was entitled to his fee, and it would be a manifest injustice to compel him to go without it, and to give that to him would be in accordance with the practice which had for the most part prevailed since the passing of the Act in 1841, and in harmony with the opinion of the Poor-law Board (now the Local Government Board), which was by no means an unworthy authority.

The judge, Mr. Lushington, gave a verdict for the defendant, with costs on the higher scale, alleging as the grounds for his decision that a workhouse infirmary was a public institution within the meaning of the section.

Mr. Fraser thereupon applied for a case for appeal, which the judge assented to.

Obituary.

JAMES WHITEHEAD, M.D., F.R.C.S.

We regret to record the death on the 3rd inst., at Sutton, Surrey, from cancer of the œsophagus, of Dr. James Whitehead, late of Manchester, in the seventy-fourth year of his age. The deceased, who was a native of Oldham, obtained his professional education at Manchester, Westminster Hospital, and Paris. In 1845 he obtained the diploma of Fellow of the Royal College of Surgeons of England, in 1850 the degree of M.D. from the University of St. Andrews, and was elected a Member of the Royal College of Physicians of London in 1859. He was also a member of various British and foreign scientific societies. Previous to its union with Owens College, Dr. Whitehead was lecturer on Obstetrics at the Royal School of Medicine, Manchester, and some years ago held the position of senior officer in ordinary at St. Mary's Hospital, and also that of Demonstrator of Anatomy. Amongst his published works are: "Diseases of the Uterine System," "Hereditary Diseases," "The Wife's Domain," "The Rate of Mortality in Manchester," and "Reports of the Manchester Clinical Hospital;" he also contributed various papers to the medical journals. In conjunction with the late Dr. A. Schoeff-Merei, Dr. Whitehead was a founder of the Manchester Clinical Hospital.

THOMAS HOWKINS, M.R.C.S.

Mr. Thomas Howkins died of heart disease at Torquay, in the fifty-fourth year of his age, on the 29th ult. His career as a medical student at University College, London, was a distinguished one. He gained, amongst other honours, the gold medal in Professor Erichsen's class of surgery; and, after obtaining the membership of the Royal College of Surgeons, established himself as a dental surgeon in Birmingham. Here he soon rose to leading practice, was appointed dental surgeon to the Children's Hospital, and more recently lecturer on Dental Physiology and Surgery at the Queen's College. For some years Mr. Howkins was one of the members of the Council of the latter institution; and when the local practitioners of dental surgery formed a Society for their specialty, Mr. Howkins was called to the presidential chair. His opening address was characteristic of him, as an accomplished surgeon and an eloquent speaker. He held one of the highest positions, as a philanthropic worker, in the Masonic brotherhood, and is sincerely mourned in a wide circle of devoted relatives and friends.

Medical News.

Apothecaries' Hall.—The following gentlemen passed their examination in the Science and *Practice* of Medicine, and received certificates to practise, on the 2nd inst.:—

Burd, George Frederick, St. Bartholomew's Hospital.
Rowlands, Thomas Frederic Watkin, Guy's Hospital.
Whitwell, Alfred Frank, St. Bartholomew's Hospital.

Dr. E. B. Truman has resigned his office as public analyst to the borough of Nottingham.

The eminent zoologist, Karl Theodore Ernest von Siebold, Professor at the Munich University, has just died at Munich.

Medical Magistrate.—Dr. Henry G. Thompson has been appointed a Justice of the Peace for the borough of Croydon.

Vaccination Grant.—Mr. W. Hood, of Castlegate, York, has received the Government grant for successful vaccination (third time).

On the 31st ult., the foundation-stone of the new sanatorium for Hull, now in course of erection, was laid by Dr. King, Sheriff of the town.

The Prince of Wales has consented to preside at a dinner in aid of the funds of the North London or University College Hospital, on May 13th.

An additional ward to the Birkenhead Corporation Fever Hospital was opened on the 31st ult. The erection has involved an expenditure of about £600.

It is stated that the first report of the Royal Commission on the Housing of the Working Classes has been agreed to, and that it is now in the hands of the Government printers.

The Shoeburyness Disaster.—A testimonial is to be presented to Mrs. Long, of the Prittlewell Sick Nursing Fund, upon whom rested the burden of nursing the sufferers from the late disaster at Shoeburyness.

Royal College of Surgeons of England.—At a meeting of the Council on the 9th inst., Mr. Edwin Hurry Fenwick, F.R.C.S. Eng., Assistant-Surgeon to the London Hospital, was elected Examiner in Elementary Physiology.

Arrangements have been completed for a "Conference on Education under Healthy Conditions," which is to be held in Manchester from April 14th to the 17th inclusive. The conference will be under the presidency of Lord Aberdare.

Parkes Museum.—A lecture was delivered in this institution on the 28th ult. by Mr. Fletcher, of Warrington, entitled "Smokeless Houses and Manufactories." The lecture was followed by a discussion, in which Dr. Coffin, Mr. Coles, and others took part.

In reference to the present movement to enlarge the Royal Surrey County Hospital, it has been suggested that the children's ward of the new wing might be specially termed the "Gordon Ward for Children," as a memorial of the hero of Khartoum.

At the recent annual meeting of the Margate Royal Sea-bathing Infirmary for Scrofula, the directors' report stated that the infirmary is approaching its centenary, and they appeal to the public for increased subscriptions in order that the iexpenditure arising from the recent extensions of the building may be met.

Society for the Study and Cure of Inebriety.—The annual general meeting of the members of this Society was held on the 7th inst., when the president, Dr. Norman Kerr, who occupied the chair, delivered an address, in the course of which he stated that the Association now numbered 279 members. A paper was then read by the secretary, Dr. W. M. Sturrock, contributed by Mr. Crother, of Hertford, Connecticut, honorary secretary of the American Society for the Study and Cure of Inebriety, entitled "The Incipient Stages of Inebriety." A discussion followed, in the course of which Dr. Farquharson, M.P., pointed out the difficulty of any legislative measures, and also asked for the results of the treatment in the Dalrymple Home for Inebriates. The chairman, in reply, stated that it was difficult to arrive at any satisfactory results from the statistics, as they had only been in existence for about a year; but that of the 49 cases treated in the Home, 50 per cent. of them had remained steadfast and had been restored to their ordinary careers, and 29 per cent. had been greatly benefited. The discussion was continued by Dr. James Stewart, Dr. Morton, and others.

Acting on the suggestion of a scientific journal in Germany, that neutral tints are beneficial to the eyesight, an enterprising publisher in that country has just issued a book printed in dark-blue ink on pale-green paper.

Prize Essays.—The following questions are selected by the Spanish Society of Medical Hydrology as subjects for prize essays, to be sent in by November, 1886:—1. Physical and Clinical Research on the Sulphuretted-Soda Natural Mineral Waters of Spain, and Comparison of Spanish Springs with the principal Foreign Springs. 2. Pathogenic conception of Pellagra, and its Mineral Water Treatment. The prize is £20, and the essays are to be written in Spanish, Portuguese, or French, and are to be signed with a motto only, and accompanied by a sealed envelope bearing the motto outside and the name and address of the author inside. The address of the secretary of the Society is Costanilla de los Angeles 13, Madrid.

Melbourne Hospital.—At the annual meeting of the governors of this institution on January 28th, it was stated that the total receipts during 1884 for the purposes of maintenance amounted to £24,302, and the expenditure to £23,277. The number of in-patients admitted was 3334, and of out-patients 13,009. The mortality in the wards was 16·7 per cent., more than one-fourth of the total number of deaths being due to phthisis; and the medical superintendent, in his report, having urged that provision should be made for the treatment of consumptives away from the metropolitan hospital, in the purer air of the country, it was unanimously resolved that steps ought to be taken by the committee of management to carry out the suggestions of the medical superintendent with reference to the removal of phthisical cases, either by establishing a separate institution in the country, or by arrangement with some other institution for their reception.

Royal College of Surgeons in Ireland.—At a special supplementary examination, held on Monday, March 16th, and following days, the following gentlemen were successful:—First Professional Examination: T. P. Connolly, C. D. Jones, R. Jones, J. H. Lovely, H. M'Carthy, R. Martin, T. O'Brien, E. O'Neill. Seven were rejected. Second Professional Examination: G. P. Carte, T. G. Goodman, C. M'Donnell, P. J. F. O'Brien, J. C. O'Donnell, J. O'Sullivan, A. V. Shine. Eleven were rejected. Third Professional Examination: W. A. Johnston. At the First Half Examination for the Letters Testimonial of the College, held on March 23rd and following days, the undermentioned gentlemen were successful:—J. A. C. Coen, A. R. T. Craig, I. Duncan, J. D. O'D. Egan, R. Elliott, E. W. Hamilton, J. C. Hines, A. M. Hunt, E. B. Kennedy, A. D. Macleod, A. E. Murphy, V. Nash, H. F. C. Pilcher, J. A. Scully, A. F. Smith, P. Stevenson, W. Stritch, W. Swan, W. E. Waters, J. A. Whitty, T. D. Wylie. Twenty-five were rejected.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Barrett, W. A. H., L.S.A.Lond., has been appointed Assistant House-Surgeon to the Royal Albert Hospital, Devonport.

Bourns, N. Whitelaw, M.D.Brussels, L.R.C.P.Ed., M.R.C.S., has been appointed Assistant-Surgeon to St. John's Hospital for Skin Diseases, vice Mr, Palmer, resigned.

Campbell, Charles M., M.D., C.M., L.R.C.S.Ed., has been appointed Assistant-Physician to St. John's Hospital for Skin Diseases, vice Dr. Boothby Dow, elected a Physician.

Dow, H. Boothby, M.D. St. And., M.R.C.S., has been appointed a Physician to St. John's Hospital for Skin Diseases, vice Dr. Oates, elected a Vice President.

Downes, Howard, L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the Victoria Hospital for Children, Chelsea, vice F. H. Hawkins, M.B., C.M., resigned.

Duncan, P. T., M.D., B.S.Lond., has been appointed Surgeon to the Croydon General Hospital.

Dunn, Hugh Percy, F.R.C.S.Eng. (Assistant Ophthalmic Surgeon), has been appointed Pathologist to the West London Hospital.

Glassington, Charles W., M.R.C.S., L.D.S. R.C.S.Ed., has been appointed Lecturer on Dental Materia Medica to the National Dental College, Great Portland-street.

Harrison, Edward, M.A., M.B.Cantab., has been appointed House-Surgeon to the Royal Infirmary, Hull.

Jackson, Henry, M.R.C.S., L.S.A.Lond., M.O.H., has been appointed Honorary Surgeon to the North Devon Infirmary, Barnstaple, vice Dr. Ferine, deceased.

Leicester, Ambrose William Montague, M.B., C.M., has been appointed Medical Officer for the Second District of the Eastbourne Union, vice Harold Arthur Tuxford, deceased.

Lyndon, Thomas, B.Ch.Dub., has been appointed Surgeon to the Wicklow County Infirmary.

Molyneux, Harold Joseph, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Upholland District of the Wigan Union, vice J. L. Molyneux.

Mortimer, J. D., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer to the Portsmouth Borough Asylum, vice James Neil, M.D., C.M., resigned.

Murray, C. Stormont, L.R.C.S. &c., has been appointed Administrator of Anæsthetics to the Samaritan Free Hospital.

Pronger, Charles Ernest, L.R.C.P.Lond., M.R.C.S., has been appointed Honorary Surgeon to the North Devon Infirmary, Barnstaple, vice C. H. Gamble, resigned.

Sanctuary, Thomas, M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Workhouse and Fourth District of the Alderbury Union, vice Gowing.

Wainewright, Benjamin, M.B., C.M.Ed., F.R.C.S.Eng., has been appointed Assistant-Surgeon to the West London Hospital, vice Albert Boyce Barrow, M.B.Lond., F.R.C.S.Eng., resigned.

Births, Marriages, and Deaths.

BIRTHS.

Gabbett.—On the 26th ult., at Gibraltar, the wife of Surgeon-Major Poole R. D. Gabbett, Medical Staff, of a daughter.

Hickey.—On the 5th ult., at the Royal Naval Hospital, Esquimalt, British Columbia, the wife of Staff-Surgeon L. Canning Hickey, M.B., of a daughter.

Hunt.—On the 3rd inst., at Queen's-road, Dalston, the wife of Joseph W. Hunt, M.D.Lond., of a son.

Illingworth.—On the 31st ult., at 1, Crowther-terrace, Clayton-le-Moors, the wife of C. R. Illingworth, M.D., of a daughter.

Paramore.—On the 1st inst., at Hunter-street, Brunswick-square, W.C., the wife of Richard Paramore, M.D., of a son.

Richards.—On the 1st inst., at 38, Arundel-square, Barnsbury, N., the wife of C. C. Richards, M.D., of a son.

MARRIAGES.

Champ—Schaeffer.—On the 4th inst., at Holloway Chapel, London, John Howard Champ, M.D.Lond., son of J. Champ, Esq., of Chelmsford, to Josephine, eldest daughter of the late Joseph Schaeffer, of Heidelberg.

Dunlop—Galt.—On the 8th inst., at the Alexandria Hotel, Bath-street, Glasgow, by the Rev. Fergus Ferguson, M.A., of Queen's-park U. P. Church, and the Rev. D. W. Forrest, M.A., of Hamilton, Thomas C. Cameron Dunlop, M.B., C.M., of Newmilns, Ayrshire, to Amy, second daughter of W. M. Galt, Esq., of The Brook, Enniskillen, Ireland.

Yeatman—Browne.—On the 12th Feb., at St. Luke's Church, South Melbourne, by the Rev. R. B. Dickinson, John W. Yeatman, M.R.C.S.Eng., son of the Rev. E. K. Yeatman, M.A.Oxon., of Auburn, South Australia, to Katherine Maude, fourth daughter of the late John E. Browne, of Northcote, Melbourne.

DEATHS.

Bond.—On the 2nd inst., at Mentone, France, George Weddall Bond, M.R.C.S., third son of the late Rev. R. Bond, Rector of Pulham St. Mary the Virgin, Norfolk.

Howkins.—On the 20th ult., at Torquay, Thomas Howkins, M.R.C.S., late of Bennett's-hill, Birmingham.

Pope. — At South-crescent, Bedford-square, Joseph John Pope, M.R.C.S.

Sankey.—On the 27th Jan., on board the *Chimborazo*, in the Red Sea, from inflammation of the lungs, George Sankey, M.R.C.S. & L.S.A.Lond., of Maidstone, aged 54.

Sturge.—On the 2nd inst., at Rue Longchamp, Nice, Emily Bovell Sturge, M.D.Paris, Officier d'Académie, daughter of the late John Roache Bovell of Demerara, and wife of William Allen Sturge, M.D.

Whitehead.—On Good Friday, the 3rd inst., at his residence, Fairlands, Sutton, Surrey, James Whitehead, M.D., late of Mosley-street, Manchester, in his 74th year.

Wilkie.—On the 3rd inst., at Paris, David Elliot Wilkie, M.D., of Rathobyres, third son of the late Rev. Daniel Wilkie of Rathobyres, Minister of New Grey Friars, Edinburgh.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, April 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Mr. J. Bland Sutton: Injuries and Diseases of the Jaws in Wild Animals.—Casual communications by Messrs. W. A. Hunt, Wenland Pedley, A. S. Underwood, and F. H. Weiss.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Whipham: A case of Myxœdema with the Microscopical Appearances of some of the Organs.—Dr. Hughes Bennett: A case of Brachial Monoplegia due to a Lesion of the Internal Capsule.

Tuesday, April 14.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Dr. J. G. Garson: On the Inhabitants of Tierra del Fuego.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Lunn and Dr. Benham: Case of Aneurysm of Abdominal Aorta, distal compression for four hours and three-quarters under chloroform, cure of aneurysm, death from gangrene of jejunum on the eleventh day.—Mr. Henry Morris: A case of Aneurysm of the Abdominal Aorta leading to Gangrene of the Lower Extremity.—Dr. Beevor: Two cases (Progressive Muscular Atrophy and Infantile Paralysis) illustrating the Localisation of Motor Centres in the Brachial Enlargement of the Spinal Cord.

Wednesday, April 15.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION.—3 P.M. Mr. R. Brudenell Carter: Eyesight in Schools.

Thursday, April 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. R. W. Burnet: Cases of Ulcerative Endocarditis, with remarks.—Mr. J. Ernest Lane: Hæmophilia.

Friday, April 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. The Council will present a report on the Rivers Pollution Bill and the Water Companies Regulation of Powers Bill.—Dr. Thomas Stevenson: Sewage Disposal.

ROYAL INSTITUTION.—9 P.M. Prof. S. P. Langley: Sunlight and the Earth's Atmosphere.

Saturday, April 18.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 9th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 3	30·26	N.E.	46	39	96	52	34	...	Bright
" 4	30·09	E.	42	38	94	51	34	...	Cloudy
" 5	29·82	E.	45	40	83	50	34	...	Cloudy
" 6	29·34	W.	45	43	91	54	42	·16	Cloudy
" 7	29·41	E.	41	40	90	55	37	...	Overcast
" 8	29·55	N.E.	42	40	...	45	40	...	Cloudy
" 9	29·58	N.W.	43	40	...	45	40	...	Overcast

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

NEW FARINACEOUS SEED.

A LETTER from M. Saco of Cochabamba to the Paris Academy of Sciences reports upon a new alimentary substance the composition of which is remarkable. The seed which is richest in nitrogenised substances is that of the Bolivian cotton tree. Its analysis shows 23·70 per cent. of fibrine and 6 per cent. of caseine. When ground, there is only 3 per cent. of loss, a yellow flour being 56¾ per cent., and a black bran 40¼ per cent. M. Saco remarks that this flour ought to be particularly suitable for pastry, as it would to some extent replace milk. It is also of service in sugar manufacture, as a substitute for carbonic acid. It is likewise good for sweets, &c. As the production of cotton seed is very large, its utilisation would be of great alimentary importance.

Dr. C. Morfit.—We will try to find a place for the article in an early number.

"EFFECTS OF HANDLING DYNAMITE."

To the Editor of THE LANCET.

SIR,—Surgeon-Major Colson's letter on this subject reminded me of having read of the same thing before; and on referring to my notes I find that Dr. Colquhoun (*Australian Medical Journal*, June, 1881) found symptoms of this kind result, as he believed, from the vapour of imperfectly consumed nitro-glycerine in the air of mines where dynamite was used, and that Dr. R. B. Nevitt (*Canadian Journal of Medical Science*, February, 1882) reported the case of a man aged forty, a contractor, in the habit of using dynamite cartridges, who suffered from headache, tinnitus, and palpitation, which symptoms disappeared when he took the precaution to wear gloves and avoided a previous trick of tasting his fingers with his tongue to see if all the dynamite was washed off. I think it is very doubtful if nitro-glycerine acts through the skin or the atmosphere; and I would suggest that the utmost caution should be used to prevent actual contact of the dynamite with the eyes or mouth, which may easily occur if the user is not forewarned of the danger.

I am, Sir, yours obediently,

ROBERT SAUNDBY, M.D.

Birmingham, April 4th, 1885.

To the Editor of THE LANCET.

SIR,—In reply to Surgeon-Major Colson's note, "dynamite headache," as it is called, is very similar to that produced by amylic nitrate, and, so far as I know, is inseparable from the use of the explosive, until immunity is produced either by prolonged use or idiosyncrasy; but no permanent injury results. With regard to the cure, there is none, except cessation from working with it; but brandy-and-water will mitigate it, and sleep generally remove it. Some physiological notes were published in THE LANCET some time ago.

I am, Sir, yours faithfully,

WALTER WICKHAM.

Surgeon to Nobel's Explosives Co., West Quarter Factory.

Polmont Station, N.B., April 6th, 1885.

THE INDEX MEDICUS.

As announced in a recent issue, the publication of the Index Medicus will be continued by Mr. G. S. Davis of Detroit. On account of the delay required to perfect the new arrangement, the first number of the journal for the current year will comprise the literature of January, February, and March, after which it will appear monthly as usual. At the end of the year, in addition to the usual annual index of names, subscribers will be furnished with an index of subjects to the volume.

A Constant Reader.—A patient suffering from a *small* irreducible strangulated femoral hernia is better without a truss, as the pressure tends to cause inflammatory adhesion and constriction of the bowel, and so increases the danger of internal strangulation. The case as described by our correspondent reads more like one of incarcerated (obstructed irreducible) than strangulated hernia. That being so, enemata (not purges), spare liquid diet, local application of ice, and complete rest constitute the appropriate treatment. In most cases of strangulated hernia, unless gangrene of the bowel is feared, it is customary to attempt reduction under an anæsthetic before resorting to the more severe operative procedure; and this rule applies with greater force to obstructed hernia. At the same time, each case must be judged on its merits.

A. B. C.—Wooton's Guide to the Medical Profession (U. Gill, Strand, London) would assist our correspondent.

Beta.—Yes, in an early number.

"APPLICATION OF MIDWIFERY FORCEPS."

To the Editor of THE LANCET.

SIR,—I should be the last in the world to despise the aid given by forceps in cases where they are really necessary, but I think there is a growing tendency among general practitioners to shorten labour by means of the forceps, especially if they be adepts in the use of the instruments. How many women there are who have to thank their impatient medical attendant, in, say, a first confinement, for a perineum ruptured into the anus—a life-long discomfort! The doctor is rarely blamed; as a rule, a woman is only too glad to get over her troubles at any price, and the medical attendant is lauded "to the skies" for his cleverness in bringing matters so quickly to an apparently successful issue. Further, I would ask those who make the diseases of women a specialty, how many of the various flexions of the uterus are due to the application of the forceps? and, again, how much their use conduces to malposition of the organ? I *cannot* but think that many of these troubles are due to the meddlesome, nay wicked, interference with what nature would successfully accomplish, and very much better than the doctor. In this opinion I am supported by the fact that uterine troubles in the rural districts are very rare in comparison with those existing in town practice, nature, not the doctor, doing the work.

It is argued by many that deformities in women are more common than they were formerly. I, for one, consider that Englishwomen of the present day are as well developed and as capable of going through maternity naturally as their grandmothers were. It is an easy matter, however, to point out errors, but to apply the remedy is more difficult. But here the remedy lies in ourselves, our own judgment, and the recollection of what is due to those who place themselves with such trust and confidence in our hands.—Yours faithfully,

W. AYLMER LEWIS, F.R.C.S.

Willow-street, Oswestry, April 7th, 1885.

To the Editor of THE LANCET.

SIR,—With reference to the above subject, permit me to describe a method of applying the forceps which I have adopted and practised for many years. I apply the lower blade first. The patient's right knee is then drawn up, and the left leg extended and drawn outwards. The upper blade is then introduced, using the left hand, the forefinger of the right hand being in the vagina to direct the blade over the head and gently press the convex edge of the blade. In this way it easily goes into its proper position and locks with the other. Extraction is then made in the ordinary manner.—Your obedient servant,

Kingussie, March, 1885. J. C. ORCHARD, L.R.C.S. Edin.

B. will see that the subject to which he has been so good as to direct our attention has not escaped our notice.

T.—Bath or Buxton.

AN OLD MEDAL.

To the Editor of THE LANCET.

SIR,—I should feel much obliged to any of your correspondents who would give me information as to a medal in my possession, of which the following is a description: Diameter 1¼ in. Obverse—A pot of flowers in high relief, standing on a label, on which is the date, also in relief, 1684, and engraved on the label, evidently prepared for that purpose, the inscription, "MR. JOANNES . DE . WALL." In the exergue are the words, 'HORTUS MEDICUS." Reverse—A skeleton with scythe and hour-glass, standing in a flowery mead. The botanic gardens in Chelsea (commonly called the "Physic Garden") were not enclosed till 1686, so that a ticket of admission, which this medal evidently is, would have no *raison d'être* in 1684. Yet, I feel no doubt that its design and execution are English.

I am, Sir, yours obediently,
M. U.

April 6th, 1885.

THE RUPTURE OF BLOODVESSELS.

MM. GRÉHANT and QUINQUAUD have reported to the Paris Academy of Sciences their experiments proving that the pressure necessary to cause the rupture of arteries is much greater than that to which they are normally subjected. The carotid artery of a dog required from thirty-five to fifty-five times the normal pressure of the blood, and the jugular vein from thirty-two to forty-five times the usual force.

Practitioner should remonstrate with the chemist, and, failing to get satisfaction, should complain of his conduct to the President of the Council, who is at present trying to regulate the sale of poisons by legislation.

"VEGETABLE FOOD FOR CHILDREN."

To the Editor of THE LANCET.

SIR,—Perhaps you will allow me to make a remark or two upon your notice under the above heading of the dinner given by Mr. S. Morley, M.P., under the auspices of the National Food Reform Society. The dinner mentioned was given with a view of showing the people of Leigh that a good dinner could be provided at small cost and yet be pleasing, wholesome, and sufficient. The menu was "Scotch broth," "lentil sandwiches," "lentil fritters," with cauliflower, potatoes, and "brown sauce," "Albert pudding," with white sauce. Whole wheat-meal bread was also given. The entire cost of dinner (for food) was under fourpence halfpenny per head. Mr. Morley and all to whom I have spoken have pronounced the dinner as having been first-class in every particular, and a good lesson in practical thrift.

In regard to non-flesh eaters being non-drinkers, I may mention that previously to my giving up "meat" I was fond of "a glass," but in three months I lost all desire or taste for strong drink. I could say much on the head of experience, as I have now been an abstainer from "meat" for upwards of seven years, and I have lost many of my former complaints. I may say that I am quite willing to place myself in the hands of any medical gentleman for the purpose of experiments in dietetics, and that without any compensation whatever. In conclusion, allow me to state that the National Food Reform Society will give its thrifty dinners when asked so to do, provided a hall, &c., is furnished free of cost. I am, Sir, yours faithfully,

F. P. DOREMUS.
Hon. Secretary, National Food Reform Society.

Finsbury-square Buildings, E.C., April 4th, 1885.

⁂ While we cannot agree that vegetarianism is a sound enough principle in dietetics to be generally adopted, we freely admit that an occasional change of fare of this kind is both wholesome and agreeable. Some persons also, even adults, thrive better, as a rule, on vegetable than on animal diet; or, at all events, on a diet in which vegetables markedly predominate. Such are those of gouty constitution. With regard to the effect of food on the liking of alcohol, no conclusion, we think, can yet be arrived at. Possibly the flavour of fruit may satisfy some as a substitute for its more potent derivative.—ED. L.

NURSING STATISTICS.

M.D. asks: "Will any of your readers oblige by referring me to a source of information regarding the cost of nursing (apart from other sources of maintenance) in the large general hospitals of the metropolis and the provinces."

E. De Manin.—There is no particular objection to gas-stoves, so long as proper provision is made for carrying off the products of combustion.

RECREATION FOR THE SOLDIERS IN THE SOUDAN.

To the Editor of THE LANCET.

SIR,—You were good enough to put a paragraph in THE LANCET of March 21st, saying that I would be glad to receive contributions of suitable literature for the soldiers in the Soudan. I now desire to thank the public, amongst whom are a few medical men, for the parcels they have sent; and as they have a right to know what I have done, I may say that since March 21st I have sent 5 cwt. of books, dominoes, draughts, and a few pipes to Suakim, about 4 cwt. to Dongola, and about 4 cwt. to Wady Halfa, and I think I shall be able to forward about 4 cwt. next week. I know from experience how a newspaper, six weeks old even, is valued in such a place as the Soudan, and consequently have some feeling for our brave soldiers who are now fighting our battles and suffering all manner of privations. Those who have kindly sent parcels please accept my thanks. I am, Sir, yours truly,

258, St. Philip's-road, Sheffield, April 4th, 1885. JOSIAH WILLIAMS.

THE DEBATE ON CHOLERA.

Mr. J. B. Scriven writes that the report of his remarks on cholera in our last issue, page 616, is incorrect. His argument as to the cause of the viscidity of the blood may be stated thus: The almost unlimited power of absorbing fluid which the blood possesses during health has not been proved to continue in full force during an attack of cholera; so that in that disease much of the water discharged in the stools may possibly not be replaced in the blood.

Calyx.—1. No; choice should be made beforehand.—2. In London, two or three days before the examinations begin.—3. We are not aware of their having been published.

ILLEGIBLE PRESCRIPTIONS.

A CORRESPONDENT from West Australia has forwarded us a prescription which, written by a brother practitioner, was handed in to his dispenser to be made up. The writing is so bad, and the figures denoting the quantity of each drug to be used so blotted and confused, that the medicine could only be made up by the knowledge of doses possessed by the dispenser. This fault of writing, through haste or carelessness, illegible prescriptions is one shared by many medical men; but it is nevertheless a grave one, and one that has frequently ere now led to serious consequences.

J. J.—A burn which destroys the skin, superficial fascia, and muscles must necessarily be followed by profuse suppuration and cicatricial contraction. The one described could not by any possibility have healed in a month. Where home comforts and careful nursing can be obtained, we consider the patient best treated out of hospital.

E. H. should consult his medical attendant.

Ixion.—We do not give advice.

MEASLES IN GUERNSEY.

To the Editor of THE LANCET.

SIR,—I hope I am not in error in accepting your note under the above ading in your last issue as an invitation to make a personal explanation. At the end of the Table of Contents in each issue of the *Glasgow Medical Journal* the following notice appears:—"Authors of original rticles may, by applying to the printer, obtain twenty-five reprints of heir articles gratis, and additional copies at a small cost." I obtained the twenty-five copies, and detail for your information the distribution which took place in Guernsey. Drs. Corbin, Crewe, Constantine, Conclean, Glasse, Thornhill, three personal friends (none of whom can be referred to by your correspondent) who furnished me with statistics concerning the number of cases in the schools, and the following officials: the Lieut.-Governor of Guernsey, the Bailiff of Guernsey, the Chief Constable of Guernsey, and Dr. Le Page, each received a copy of the *Journal*. I defy your correspondent to supplement this list. The copies sent to the Lieut.-Governor, the Bailiff, and the Chief Constable were sent officially, and were marked, as the enclosed copy is, on pages 2 and 3, directing their attention to the comments there on the sanitary condition of the place, a subject which has occupied them much during the past winter, and on which medical opinion was invited. The Lieut.-Governor and the Chief Constable are not patients of mine, and they received their copies addressed to them as officials at their offices.

The allegation that the recent epidemic of measles differed from the description given of it in my paper will not be much credited in Guernsey. Only those who failed to observe, or were blinded by prejudice, could make a contrary statement.

I am afraid that your notice will render it difficult for me to keep my comments on the sanitary condition of the town within the official limits which I had intended even until my reply reaches your columns. The statements made in my paper are well known to be correct, and could only have done public good while their distribution was limited to those concerned in the local sanitary administration.

I am, Sir, your obedient servant,
J. AIKMAN.

Guernsey, April 4th, 1885.

To the Editor of THE LANCET.

SIR,—My attention has been drawn to an extract from THE LANCET of the 4th inst., in which exception is taken to Dr. Aikman's action in sending copies of his paper in the *Glasgow Medical Journal* on the Epidemic of Measles in Guernsey to the patients of another medical man. As I received a copy of his paper from Dr. Aikman, and may be one of the recipients alluded to, I ask your permission to state that I, as Lieut.-Governor of Guernsey, have publicly interested myself in the sanitary state of the island, and have no idea that the paper was sent to me except in my official capacity.

I have the honour to be, Sir, your obedient servant,
H. A. SAREL, Major-General.
Lieutenant-Governor of Guernsey.

Bournemouth, April 7th, 1885.

To the Editor of THE LANCET.

SIR,—At Dr. Aikman's request, I hereby beg to state that I received a copy of the reprint of his notes on a recent epidemic of measles in Guernsey, addressed to me at the Constable's Office in my official capacity; also that the copy was marked at the passages referring to the sanitation of the town.—Yours faithfully,
JULIUS A. CAREY, Chief Constable.

Guernsey, April 4th, 1885.

⁂ We think Dr. Aikman's letter satisfactory. Moreover, we have read the paper on Measles, and cannot see anything in it to justify the complaints made. The epidemic had been very extensive and rather severe, and was the more noticeable as being rare in the island.—ED. L.

PREVENTION OF CARBUNCLE IN CATTLE BY VACCINATION.

To the Editor of THE LANCET.

SIR,—I should be much obliged if any of your readers could tell me where I can get lymph for "vaccinating" cattle as a preventive against carbuncle. I believe Pasteur is the discoverer of the method and preparation.

I am, Sir, your obedient servant,
F. G. V.

April 7th, 1885.

WHOOPING-COUGH.

Mr. C. Clark Burman, L.R.C.P. & S. Ed. (Belford, Northumberland), solicits replies to the following questions:—(1) Are the paroxysms of whooping-cough more frequent always at night, whether the patient sleeps or not? (2) At what hours of the night are they most apt to occur? (3) What relation do they bear to the sleep of the child—i.e., during profound sleep or otherwise? (4) What circumstances appear to induce them?

Mr. W. Holderness.—1. Berkeley Hill's work on Bandaging and Minor Surgery.—2. Lewis S. Pilcher's Treatment of Wounds. The latter, an American work, is one of the best on the subject with which we are acquainted. It is published by Messrs. William Wood and Co., 56, and 58, Lafayette-place, New York.

THE BIRMINGHAM MEDICAL INSTITUTE.

To the Editor of THE LANCET.

SIR,—The interesting account, given in to-day's issue of THE LANCET, of the Birmingham Medical Institute, ought to make one glow with pride at having the privilege of living even within two or three miles of such a noble and generous Society. But, Sir, there is another side to the picture, and this, I am sure, out of regard for your time-honoured maxim, *Audi alteram partem*, you will allow me to present with the pen of a truthful but not unfriendly critic.

Rather more than a year ago a "registered practitioner" applied to the sub-librarian of the above-named Society for information as to the steps to be taken to enable him to avail himself of the library. He was told by that official that the payment of a guinea was the chief thing required, although there was another ceremony to be observed, which, however, was a "mere form." The ceremony thus described as a "mere form" was the signing by six members of the institute of a paper left in the reading room for that purpose. The "registered practitioner" paid the fee, and in due course two signatures were affixed to the paper. Then in a short time the document disappeared altogether, leaving the "registered practitioner" to believe that the "mere form" had been duly complied with. His surprise, however, was great when, three months afterwards, on applying for a book, he was told that he was not a member. On further inquiry he learned that the signatures referred to had been withdrawn at the dictation of a "distinguished hospital surgeon," who had forbidden his name to be divulged. I regret to say that the "registered practitioner" lost his temper on this occasion, though I do not much wonder that he yielded to this infirmity. To have been blackballed by a ballot would have been intelligible, and timely notice would have been given of the result; but the above-described method of procedure seems both ill-natured and illiberal. The "registered practitioner" has no complaint to make against the officials of the Society, either honorary or paid, but he would like to see the "distinguished hospital surgeon" emerge from his Olympian cloud and give some explanation of his conduct.—Yours obediently,
WILLIAM J. NOTLEY, M.D.

Birmingham, April 4th, 1885.

F.R.C.S.—Reports from Her Majesty's Representatives at European Courts and in the United States on the Working of the Lunacy Laws in the Countries in which they reside. Miscellaneous, No. 1 (1885). Messrs. Hansard, 13, Great Queen-street, W.C.

Mr. E. Playter.—We do not think it would serve any good purpose to open the discussion our correspondent suggests. There can be no doubt of "the present usefulness of the practice."

"A HALFPENNY A WEEK."

To the Editor of THE LANCET.

SIR,—In answer to an annotation under the above heading, which appeared in your issue of March 21st, the Committee of the Working Men's Medical Society at Sheerness would like to correct the serious errors made in that statement. As to there being some sixty applicants who applied for the position as advertised in THE LANCET of March 7th, it is due to them and others to know that the working men of Sheerness did not expect a medical gentleman to work on such unremunerative terms as appeared in the paragraph alluded to. A similar Society to ours has been in existence this past forty years; it is true our contribution is only one halfpenny per week, but it is for each individual entered, which on a little consideration will show that the scheme is very feasible. Let us give a short digest of how our Society now stands, and we think it will conclusively show the different gentlemen who applied that what we stated in our advertisement was more than correct.

The Society was inaugurated on March 1st, 1885; our present number of members (March 29th) is about 3300, which gives £411 per annum, the accouchement fee for members' wives are paid in addition to these contributions, which would equal another £150, making a total of about £560 per annum; private practice is also allowed. None of the above amounts are deducted for working expenses.

In reference to the paragraph alluding to the Portsmouth Association, it was stated at the meeting that they paid their doctors about £300 and £400 per annum each, and not, as represented, that amount divided between them. We hope this statement will satisfy those gentlemen who have written to us on this subject since the erroneous insertion of March 21st.

I am, Sir, yours respectfully,
THOS. LOVATT, Secretary.
For the Committee of the Working Men's Medical Society.

Marine Town, Sheerness, April 6th, 1885.

under the great division of inland climates, the third under marine climates. In rapidly glancing over these divisions, I shall have the opportunity of mentioning some other localities which are used as health resorts in phthisis, although they could not claim pure air, or air of an aseptic character, as one of their prominent features.

Allow me, gentlemen, to begin with the climates of elevated regions (altitude or mountain climates), *which only in comparatively recent times* have come into favour in Europe; although they were used in Peru at an earlier period (Archibald Smith). They were somewhat roughly treated in the beginning. A justly esteemed author on diseases of the lungs, for instance, in 1871 calls the plan of treating consumptive patients by long residence in the Alps "a startling quasi-sensational novelty in climatic therapeutics" in reference to a paper of mine "On the Treatment of Phthisis by Prolonged Residence in Elevated Regions" in the Medical and Chirurgical Transactions of 1869. In further discussing this plan the same author speaks of the winter in an "elevated site in Switzerland" as a sojourn "amid mist, fog, *damp, the fiercest cold, frost, ice, and snow.*" Surely, great physician though he is, he is somewhat misinformed on this subject, and has not himself visited the High Alps during winter, but has possibly formed his impressions from a writer who practised during winter in Southern Italy. I shall discuss the author's objections *seriatim*, as this will show the character of the climate.

1. The "mist" and "fog" amid which he imagines the patient to be during winter in the High Alps exist, indeed, only in imagination. They are at all events excessively rare in those high valleys in winter, and when Zurich, Berne, and Basle are for days together wrapped in dense mist, the sky is most blue in the High Alps, and the air *perfectly transparent and transcalent.* M. Billwiller, the head of the Meteorological Department in Switzerland, has quite lately organised a system of recording sunshine at different meteorological stations, and I have, by chance, before me the comparison between Zurich and Davos, during the months of last November and January (having mislaid the number for December). At Zurich the amount of sunshine during the month of November was 48½ hours, or an average per day of 1 hour 36½ minutes; ditto at Davos, 128 hours, or 4 hours 16 minutes per day. During the month of January at Zurich the recorded sunshine was 37 hours, or 1 hour 11 minutes per day, the same at Davos, 137·8 hours, or 4¾ hours per day. All those authors who are thoroughly *acquainted with the winter in the Alps, as Spengler, Waters,* Frankland, Ludwig, Volland, Addington Symonds, Theodore Williams, and Jaccoud, amongst others, have described the absence of mist and the abundance of sunshine, and it is only a corroboration of their statements, when I add, that while at Zurich and in the whole of the lower regions of Switzerland a thick mist entirely shut out the rays of the sun from the 18th to the 27th of January last, 6 hours of sunshine were registered daily at Davos, and what kind of sunshine this is the dwellers in the *lower regions who have* never been in the High Alps during winter can scarcely imagine. At the end of November, 1869, I spent on the Piz Languard, about 10,700 feet above sea level, and on an ice pyramid of the Morteratsh glacier (about 9700 feet) more than 1½ hours on two consecutive days without an overcoat. *As long as I remained in the sun I* never felt warmer in August and September at the same localities, but in the shade an overcoat would have been just a comfort, though I did not feel cold in spite of a temperature of only 20° to 25° F., the air being perfectly calm. A black bulb thermometer *in vacuo* showed in the sun between 88° and 92° F., while an ordinary thermometer showed only between 31° and 32° F., and the exhaled breath became rapidly condensed. This shows that the air itself was only slightly heated by the sun's rays, though the body covered with woollen clothes had all the benefit of the warming rays. I specially mention this difference between the black bulb and the ordinary thermometer because it shows that the air inhaled is cold, to which point I shall later return. During these two days a dense mist prevailed in the lower part of Switzerland and Upper Italy.

2. *How can the author call the air damp, and how has he* obtained this notion? Dr. Frankland speaks of the "excessive dryness of the air at Davos," and further on says, "The absence of suspended watery particles in the air has no doubt very considerable influence in preventing the chilling of the skin." I need only consider the facts that air at a low temperature can hold only a very small quantity of watery vapour, and that *if that small maximum is reached* the vapour must become condensed in the shape of mist or fog, the rarity of which I have already mentioned; and the usual transparency and transcalency show likewise that the quantity of suspended vapour can be only very small. All the authors agree on this point, and Dr. Volland and Mr. Waters have further pointed out that also the air in the *rooms is very dry, indeed, even drier than out of doors.* Mr. Waters found the relative humidity in his bed-room at Davos during the winter 1881-82 varying from 25° to 35°; the temperature of the room being about 60° F. with an open window at night.

3. "The fiercest cold and frost" of which our author speaks is scarcely felt by the patients at Davos or St. Moritz; Spengler, Waters, Frankland, Unger, A. Symonds, Theodore Williams, Ludwig, Rohden, Peters, and myself, as well as many others, have often discussed this question. The main points which prevent the cold being much felt are:—(1) That the air is dry; (2) that it is calm; and (3) that the sun heat is very great. In an excellent article in a recent number *of the Practitioner on "Winter Health Resorts" the same* question is discussed. "The temperature of the human body depends very much on the dryness of the air. A Canadian feels it much colder at 4° below freezing-point in London than in Canada when the thermometer stood at 40° below zero. The dryness of the air in Canada more than compensates for a difference of 68°. Dry air has very little capacity for heat, so that when it is at rest it conducts away very little heat from the body." Wind changes the matter very considerably; but wind, as I have said, is rare during winter in the chief Alpine health resorts; partly through the shelter of the mountains, partly through the absence of local winds, as every place is covered with snow. *In summer there is much more wind, and it is then often very* disagreeable, and unless care is taken chilling; but it is not so injurious as it would be in winter. I have spoken already of the great sun heat, and the papers of Waters, Frankland, and others are well known. The result of this sunshine and absence of wind is that even rather delicate invalids can sit for many hours lightly covered on open terraces and in verandahs, or on seats, along the southern slopes of the mountains or round the ice-rink; that they can frequently drive in sledges and take short walks; *while the hardier* ones can join in long excursions, in skating, and tobogganing; the time passes quickly and the majority of invalids manage to be more in the open air than on the Riviera. Is the calm, dry cold of the Alpine winter health resorts injurious? My answer is decidedly, No. It is not only not injurious, but beneficial to all those who are suited to this climate. When warmly dressed, *the invalids who are able to walk can be* out, even if there is no sun, provided there is no strong, cold wind; and the majority of them can with reasonable precautions in dressing even walk on calm evenings. The danger of becoming chilled at the time of sunset is far less than in the Riviera climates. It is only a remnant of our old *prejudice which can make us afraid of dry, calm, moderate* cold. A consumptive patient is in a better condition for recovery if he lies on a couch in a judiciously selected spot in the open air even in winter than in a shut-up room. The low temperature of the air has the obvious advantage that the bacillus and other microbes cannot thrive in it, and that putrefaction is arrested. In addition to this, the low temperature of the inhaled air leads to loss of heat, and of a large amount of water. This, I presume, acts as well in an antiphlogistic as also in an antiseptic way; and it may arrest the disease by drying up a sore and by checking the thriving of the bacillus within the lungs. The diminution of the expectoration observed in many cases is partly due to it, and, perhaps, also that of the night perspiration. The pulmonary circulation becomes increased, in order to supply the water lost, and the energy of the right heart, and of the cells and tissues of the lungs, must be likewise favourably influenced. The respiratory thoracic movements cannot escape being rendered more active, and through this expansion of the thorax, strengthening of the thoracic muscles and a help to all the respiratory acts. It is not too much to say that a great part of the favourable influence of the winter climate of the High Alps takes place through the increased inhalation of *this cold,* dry, pure, and rarefied air.

4. I fully acknowledge the author's correctness with regard to ice and snow in the winter climate of the High Alps, but *with this I find as little fault as with the calm cold air.* Indeed, they are almost inseparable, for the ice and snow

which cover the ground prevent dust and decay, and the microbe laden emanations from the soil. The calmness of *the air, the absence of local winds* ("Thal" and "Berg" winds), are in great part due to the ground being covered with ice and snow; furthermore, where the roads are for months together covered with snow, the invalid can walk on them without the danger of wet feet, and the healthful *exercises of sledging, tobogganing,* and *skating* for the more hardy invalids and their companions are certainly not to be despised.

After having discussed the bad character of our author's Alpine winter I must devote a few minutes to the purity and rarefaction of the air. The *purity, or aseptic character,* is intimately connected with the cold, ice, and snow, and also with the sparseness of population and industries. To this point, and particularly to the comparative absence of spores, I had always been inclined to ascribe the favourable influence of residence at high elevations on phthisis; and when Professor Tyndall in 1868 directed my attention to Pasteur's researches, published in 1862, I became strengthened in this view, which I mentioned at the Medical and Chirurgical Society in 1869. The facts published by Miguel, and already quoted above, as to the absence of microbes in the Alps at localities above 2000 metres, strikingly show the purity of the air. I am not, however, blind to the fact that wherever a large number of human beings, especially invalids, congregate, there the purity of the air is likely to be impaired. The rarefaction or rarity of the air with which its lightness or diminution of pressure is intimately associated has been the subject of many theories; for instance, as causing a starvation of oxygen and the peculiar kind of mountain anæmia, of the existence of which, however, I have not been able to convince myself in the Alps. What seems to be certain is that more blood flows to the surface of the skin, that this organ becomes better nourished, that internal organs become in proportion somewhat unloaded, and, further, that the separation of carbonic acid from the blood in the lungs is facilitated (Marcet and Chermond). I am less certain with regard to the view that a diminished quantity of oxygen contained in a given quantity of air leads to the inspiration of a larger volume of air, and through this to a greater expansion of the lungs and thorax. This theory has been quite lately expounded in a very plausible way by Professor Jaccoud, a great advocate of the curative effect of Alpine climates, in his valuable work on phthisis, of which a good English edition by Dr. Lubbock has just been published. I am not prepared to say that this view is incorrect; but, as I have pointed out already in 1869, and in later communications on the subject, the experiments of Frankland and Tyndall on the burning of candles on the top of Mont Blanc and at Chamounix show that, although the light-giving power of the flame is much less on the top of Mont Blanc, the quantity of stearine consumed, or, in other words, the energy of combustion, is almost precisely the same as at Chamounix. This remarkable result is ascribed by the author of the experiment to the greater mobility of the atoms in the rarefied air, "making atonement for the smallness of their number by the promptness of their action." I can corroborate the experience of Dr. Theodore Williams regarding the increase of the circumference of the thorax, and especially of the diseased side of the chest in several of those cases which have shown a satisfactory progress. I am not, however, sure that this is due to the rarity of the oxygen, as the inhalation of the dry cold air already accounts for it. Whether the thinner air of high regions is unable to hold the microbes floating, and whether in this way rarefaction *is a source* of purity, as Miguel seems to think, I am not able to say; but this point could, I should think, be settled by experiment.

I must deny myself the pleasure of further entering into the details of the peculiarities of mountain air and mountain health resorts. The main physical features important to us are:—1. The purity or aseptic nature; the comparative absence of floating matter. 2. Dryness of the air and soil; comparative absence of mist. 3. The coldness or coolness of *the air temperature* and the great warmth of the sun temperature. 4. The rarefaction and low pressure of the air. 5. The intensity of the light. 6. The stillness of the air in winter. 7. A large amount of ozone. The effects on the invalid suited to such climates are—increase of appetite, improvement of sanguification and general nutrition, strengthening of the heart and circulation, raising of muscular and nervous energy, and of activity of the skin. Under the influence of such constitutional progress, which is assisted by the local action of the aseptic dry and cold air by increased ventilation of the lungs, and by compression of the diseased parts *through healthy* and emphysematous dilatation of the surrounding tissue, we observe a gradual improvement in the state of the lungs, leading to arrest of the disease and actual cure.

(To be concluded.)

THE RADICAL CURE OF VARICOCELE.

BY HENRY LEE, F.R.C.S.,
CONSULTING SURGEON TO ST. GEORGE'S HOSPITAL.

THE difficulty of performing an operation for the radical cure of varicocele which is at once safe and effective, without any prolonged after-treatment, is evidenced by the number of different proceedings which have of late been advocated. Favourable results have been obtained by most or all of these methods where the veins have been simply enlarged; but in the severer cases, especially when *accompanied* by a relaxed condition of the skin of the scrotum, the benefit derived from the operation has been only temporary.

The operation which I have now been in the habit of performing for some years in such cases is as follows. The surgeon's hands and instruments are washed in a solution of carbolic acid and wiped dry. The patient is placed in a convenient position, generally on the left side of the bed, under the influence of ether. A portion of the skin of the scrotum is then pulled up and removed either by curved scissors or a knife. The longest diameter of the wound should be transverse. The edges of the wound separate to a considerable distance. The enlarged veins are rolled between the finger and thumb, and can easily be distinguished from the vas deferens. Should there be an artery of any size *among* the veins its pulsation can be felt, and in that case it is separated from the veins before the operation is continued. A hare-lip needle is then introduced through the wound under some of the veins, and a figure-of-8 ligature tied round its ends over the veins. The same thing is done with another needle about half an inch distant. A thin knife is then introduced on the flat *beneath the veins, its edge* turned towards the surface, and the veins divided. An ordinary iron cautery, previously heated in the fire, is dabbed on a wet sponge until very little steam is produced; the cautery is then applied to the extremity of the divided veins, and allowed to remain quietly in contact with them for a quarter or half a minute. The tissues adhere firmly to the iron and to each other, and the blood is firmly coagulated in the veins. In order not to disturb the parts by any unnecessary violence, the tissues are gently separated from the cautery by the handle of a scalpel. The needles placed under the veins are now removed and the edges of the wound brought together by short fine hare-lip pins, or by a continuous suture of carbolised catgut. The loss of blood in this operation often does not exceed a teaspoonful. The wound generally heals in great part by first intention. The cautery, applied as described, produces no slough. The charred surface is absorbed, as are also the clots in the veins. At the end of forty-eight hours the patient may be removed to a sofa, and may leave the house within a week.

The son of a medical man had for years been troubled with greatly enlarged veins and a relaxed scrotum, accompanied with occasional pain. He was operated *upon on a* Wednesday, and went down to Brighton on the following Tuesday. An officer in the army, having little time at his command, and wishing particularly to see his friends before rejoining his regiment, had the operation performed and left London within a week. In both these cases the result was most satisfactory. Details of cases might readily be multiplied.

The only inconvenience that has arisen is that in some instances a portion of the wound has been long in healing, but this is accompanied with no pain, and does not prevent the patient going about his usual avocations. It may, however, not be altogether a disadvantage to allow the wound to granulate, as the longer that action continues, the firmer will be the cicatrix. The one danger in operating for varicocele is absorption by the open mouths of the veins. If these are effectually closed a wound in the scrotum may be safely treated in the same way as a wound on any other part of the body, and it requires no very particular attention. When a vein is divided by ligature, or if a red-hot cautery be applied, some amount of ulceration and suppuration necessarily takes place. Both these processes are incompatible with the adhesive action, and the latter can only commence when the former has ceased. If a ligature be applied to a vein, a patient is never safe so long as it is ulcerating its way through; and the same may be said when a portion of the vein is made to slough by the application of the red-hot iron or by the galvanic cautery. The caution that surgeons have always shown in dealing with veins affords abundant evidence of the risks incurred if the veins be not completely closed. This object is effectually accomplished by the application of the actual cautery as above described. The parts are glued together before the operation is completed, a chemical adhesion of the different tissues takes place, the blood in the veins is firmly coagulated, and the vessels are securely sealed.

The removal of a portion of the skin in front of the scrotum as a remedy for varicocele was first, I believe, practised by Dieffenbach, and was advocated by the late Mr. Briggs. In an able memoir published by Dr. Henry, Surgeon to the New York Dispensary, he gives the credit to Sir Astley Cooper of having originally suggested the operation of "amputation of redundant scrotum in the treatment of varicocele." While this operation, he says, had met with much favour and been attended by successful results in New York, it has been comparatively neglected in England, Germany, and France.[1] Mr. Wormald proposed to lessen the scrotal bag by drawing a portion of it through a ring which was worn during the daytime. This is a plan of treatment not uncommon in the present day. The persistency with which patients affected with varicocele occasionally wear these rings and different kinds of suspensory bandages indicates conclusively the relief which they sometimes afford. As long, however, as the veins are left in a varicose condition, the disease cannot be cured. The practice soon, therefore, came into use of obliterating the veins by ligature, and later still by subcutaneous section. A large proportion of the cases in which the last-named operation has been performed have been permanently cured, some have been relieved, and in some the varicocele has become as troublesome as before.

The cases which have been the least successful are those in which the skin of the scrotum has lost its natural elasticity and become relaxed and redundant. The difficulty of dealing with such cases first suggested to me the plan of combining the operation of dividing the veins with that of removing a portion of the skin of the scrotum. This operation may be modified to suit individual cases, but in principle it is that which I am now in the habit of performing. The use of an anæsthetic entirely removes any objections that might be made to the use of the actual cautery on account of any pain which it might be supposed to produce in these operations. Patients sometimes, but very seldom, complain of some burning pain afterwards, but they certainly do not complain more than when the veins are subcutaneously divided. It is well that the bleeding should be completely controlled by pressure before the cautery is applied, otherwise the blood prevents the cautery from remaining fairly in contact with the orifices of the vessels. This may be the case if the iron be heated above the boiling-point of water. There is then a danger of the blood instead of coagulating being boiled, and also of the surrounding tissues being destroyed, instead of adhering to each other. The great advantage of operating with the actual cautery is that the divided vessels are completely sealed, and if the operation be properly performed no bleeding occurs, and no coagula are left in the wound. But that which is of far greater importance is that no absorption can take place through the veins. This is, in fact, the object of all antiseptic dressings. As far as any constitutional effects are concerned, lymphatic absorption is, I believe, unknown as a consequence of the operation above described.

The late Sir James Simpson was in the habit of relating how, after the American War, when he entertained some of the Northern surgeons at dinner, he told them that he believed that they had been in the habit of poisoning the wounds of the Southern soldiers who fell into their hands. The medical officers laughed at the idea; Sir James persisted, and the officers became angry. At length he explained to them that the pieces of flesh, including the divided extremities of the arteries, which were strangulated by ligatures died, decomposed, and were apt to poison the wounds. It is these decomposing particles which have necessitated the various forms of antiseptic dressing which have of late been so profusely used. But if the veins be closed, no such absorption can take place. In surgical operations where the veins can be completely sealed, as in cases of varicocele, venous absorption may be prevented with the greatest certainty.

Many years ago a patient presented himself at St. George's Hospital in whom the scrotum was so relaxed that when he lay upon his back the testes would hang over on the outer side of the left thigh. There was a well-marked varicocele. It was thought practicable to remove a large portion of the skin of the scrotum, and to obliterate the veins at the same time. Two needles were introduced under the most prominent veins far apart. Over the ends of each needle a figure-of-8 ligature was passed, so as to command any bleeding from the veins. The intermediate portion of skin, together with the subjacent tissues containing the enlarged veins, was then removed, leaving a very considerable gap. No hæmorrhage occurred. The needles were then drawn towards each other and the edges of the wound held in position. The wound readily healed and the testis was subsequently retained very nearly in its natural position. This was the first case in which this operation was performed. Previous to that time no one thought of cutting deeper than the skin, as no means were then in use which would effectually control hæmorrhage from the spermatic veins. In the operation which I now perform the portion of skin to be removed is dealt with first, and the veins divided afterwards. The veins are sealed so as to prevent hæmorrhage on the one hand and absorption on the other, and the needles at once removed.

In cases of varicocele where the scrotum is not relaxed, the subcutaneous division of the veins answers very well without the removal of any skin. It was originally proposed to allow the needles which compressed the veins to remain undisturbed for forty-eight hours. It has since been suggested that they might be removed at an earlier period. As far as any fear of hæmorrhage is concerned, this might certainly be done; but, on the other hand, there might be a danger of the circulation through the veins being restored before their divided extremities were consolidated. In the severer cases in which the scrotum has become unnaturally pendulous, it is advisable to remove more skin than at first might appear necessary, so that that which is left may act the part of a suspensory bandage.

Savile-row, W.

WHAT IS THE EXPLANATION OF ACQUIRED IMMUNITY FROM INFECTIOUS DISEASES?

By GEORGE M. STERNBERG, M.D.,

MAJOR AND SURGEON, U.S.A.

(Concluded from p. 657.)

That full justice may be done to the "antidote theory," I quote fully from the latest authority who has written in its favour. Klein says: "There is another theory commonly spoken of as the 'antidote theory' (Klebs). According to this, the organisms growing and multiplying in the body during a first attack produce, directly or indirectly, some substance which acts as a sort of poison against a second immigration of the same organism. I am inclined to think that this theory is in harmony with the facts. There is nothing known from the observations before us which would negative the possibility of the correctness of this theory; nay, I would almost say all our knowledge of the life of the micro-organisms points to the conclusion that the different species are associated with different kinds of chemical processes, and that as a result of the activity we find different chemical substances produced.[1] The different fermentations connected with the different species of fungi afford striking illustrations of this view. According to this theory we can well understand that, just as in the case of an animal, say a pig insusceptible to anthrax, the insusceptibility being due to the presence in the blood and tissues of a particular chemical substance inimical to the growth of the bacillus anthracis—so also in the case of a sheep or ox that has once passed through anthrax—there is now present in the blood and tissues a chemical substance inimical to the growth and multiplication of the bacillus anthracis whereby these animals become possessed of immunity against a second attack of anthrax. Whether this chemical substance has been elaborated directly by the bacilli, or whether it is a result of the chemical processes induced in the body by the bacilli during the first illness, matters not at all; it is only necessary to assume that the blood and tissues of the living animal contain this chemical substance. Some observers (Grawitz, &c.) are not satisfied with this theory, but assume, &c.[2] ...... On the whole, then, we may take it as highly probable that, owing to the presence in the normal blood and tissues of a living animal of a chemical substance inimical to the growth of a particular micro-organism, this animal is insusceptible to the disease dependent on the growth and multiplication of this micro-organism; and, further, that in those infectious maladies in which one attack gives immunity against a second attack of the same kind, one attack produces a chemical substance in the blood and tissues which acts inimically to a new immigration of the same organism; hence the animal becomes insusceptible to a new attack, or is 'protected.' This is not the case with all infectious maladies, for, as is well known, in a good many instances, a single attack does not protect against a second; and, as is also well known, a first attack may protect only for a limited period, or for a period greatly differing in different individuals. All this would be explained by our theory in the same way as it is explained by the other theories—viz., when one attack does not protect, no inhibitory chemical substance has been produced; while in those diseases in which one attack does protect only for a limited period, the necessary inhibitory substance has only lasted for a limited period, and so on."[3]

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[1] This operation has lately been revived in Paris.

[1] This is beyond dispute.—G. M. S.

It is unnecessary to point out that Klein simply states and reiterates his own opinion in all that he says with reference to the theory which he favours, and that no experimental evidence is adduced in support of this opinion, nor, I may say, any arguments worthy of consideration; yet it would seem that, as in the case of the first hypothesis, a very simple experiment should decide whether this view is tenable. Fortunately, the experimental evidence which shows that it is untenable is at hand, and has been furnished in part by Klein himself.

It is difficult to understand the kind of reasoning which excludes Pasteur's hypothesis upon the ground that the anthrax bacillus multiplies freely in the blood of an immune animal, or in an infusion of the flesh of an animal dead of anthrax, but which supposes that a chemical poison present in the tissues prevents the development of the bacillus in the protected animal. What, then, has become of this poison when the blood of such an immune animal is drawn from its veins into a test-tube, or in the infusion made from the flesh of a recent victim of anthrax? We might possibly admit that the hypothetical chemical substance which remains for years in the blood and tissues of an immune animal, notwithstanding the elaborate provision made by nature for the excretion of useless or injurious products, is dissipated by boiling in the infusion made from the flesh of the animal; but this assumption will not apply to blood freshly drawn from its veins, which also furnishes an admirable culture-medium for the anthrax bacillus. But even this possibility has been disproved by Pasteur, who has given the *coup de grâce* to the antidote hypothesis by the following experiment. He says, "Is this the only possible explanation of the phenomenon?" referring to the exhaustion theory. "No, we may admit the possibility that the development of the microbe, in place of removing or destroying certain matters in the bodies of the fowls, adds, on the contrary, something which is an obstacle to the future development of this microbe. The history of the life of inferior beings authorises such a supposition. The excretions resulting from vital processes may arrest vital processes of the same nature. In certain fermentations we see antiseptic products make their appearance during, and as a result of, the fermentation, which put an end to the active life of the ferments, and arrest the fermentations long before they are completed. In the cultivation of our microbe products may have been formed the presence of which possibly may explain the protection following inoculation. Our artificial cultures permit us to test the truth of this hypothesis. Let us prepare an artificial culture of the microbe, and after having evaporated it *in vacuo*, without heat, let us bring it back to its original volume by means of fresh chicken bouillon. If the extract contains a poison to the life of the microbe, and if this is the cause of its failure to multiply in the filtered liquid, the new liquid should remain sterile. Now this is not the case. We cannot, then, believe that during the life of the parasite certain substances are produced which are capable of arresting its ulterior development."[4]

If Pasteur's experiment, which relates to fowl cholera only, is not considered conclusive, let us consider the tax upon our credulity which this hypothesis involves. In the first place, the individual who has suffered attacks of several different infectious diseases—as for example, of small-pox, measles, scarlet fever, yellow fever, &c.—has stored up in his blood and tissues as many distinct chemical substances as there are diseases in the list, each of which was produced by the development of a specific microbe in his body. These poisons in no way harm the individual, and no one of them, or even the combined action of several, has any effect in preventing the development of other pathogenic microbes of the same class. How different this from the action of known antiseptics, which act in a similar manner, although not in all cases in equal amounts, in restricting the development of all micro-organisms, pathogenic or non-pathogenic, of the class to which known disease germs belong. And how improbable it is that certain substances exist capable of preventing the development of these low organisms in the animal body, which are not injurious to the higher and more sensitive organism, when all our laboratory experiments go to show that the most potent "germicides" and antiseptics are poisonous agents, which are capable of destroying animal life in a relatively smaller proportion than is required for the destruction of "germs." Moreover, we are to believe that these several poisons remain indefinitely in the ever-changing blood and tissues, and that normal physiological processes, by which waste products formed in the cell laboratories of the body are quickly removed from the circulation, are impotent for the excretion of these very peculiar poisons, although non-lethal doses of potent vegetable and mineral poisons are known to be removed from the body in a comparatively short time. We are also required to believe that during the development of a vaccine vesicle in an infant a poison is formed, inimical to the development of the small-pox germ, in such quantity as to afford it protection during the period of its growth and maturity, and perhaps during a long life. In short, the difficulties in the way of accepting this explanation seem to be quite equal to those involved in the "exhaustion theory," and we are obliged to look further for an explanation of the phenomena in question.

As already stated, the explanation which seems to the writer most satisfactory, and most in accordance with the facts, is that which has been denominated the "vital resistance theory." It is well known that living tissues resist the invasion of putrefactive organisms, while dead tissues quickly fall into putrefactive decomposition. So, too, blood within the vessels of a living animal does not behave like the same fluid in a test-tube, but in some way disposes of the bacteria of putrefaction when they are injected into the circulation instead of nourishing them and being decomposed by them. Perhaps the histological elements of the vital fluid which exhibit the greatest vital activity—namely, the leucocytes—may be directly concerned in removing from the circulation bacteria which are introduced experimentally on those pathogenic or harmless organisms which by accident find their way into the blood. However this may be, it is evident that the blood and tissues of a living animal resist putrefaction by virtue of their vitality, and we are justified in using the term "vital resistance" in explaining the immunity of certain animals (acquired), or of certain races (inherited) to the invasion of certain pathogenic micro-organisms belonging to the same class as that which includes the bacteria of putrefaction, although we may not be able to explain the *modus operandi* of this vital resistance or to define exactly what vitality is. We know, at least, that vital phenomena are exhibited by a special kind of matter called protoplasm, and that the living portion of the histological elements of the blood and tissues is composed of the complex nitrogenous substance which has received this name. We know, too, that this living matter, although apparently the same in its gross chemical and physical structure wherever found, has the most varied vital characters, which have been transmitted to it by living matter of the same kind from which it is derived. The special vital characteristics of each bit of protoplasm, enclosed in a cell wall or otherwise, are manifested during its growth, and, as is well known, certain cells—as, for example, the fertilised ovum of a mammal—develop into most complex organic structures; while others, as in the case of a micrococcus or a yeast cell, simply produce other cells like themselves. Not only are the characters which distinguish one species of animal or plant from another transmitted in this way, but individual characteristics may be transmitted in like manner, especially those of a vital or physiological order—such as a feeble or robust nervous or digestive system, a tendency to long life or to premature decay, vital resistance to morbific influences, &c.

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[2] Already quoted, see ante.

[3] Op cit., p. 219.

[4] Op. cit.

As examples of inherited physiological peculiarities of the order last mentioned, I may refer to the predisposition in some families to diseases of the nervous system—insanity, epilepsy, and the like,—to the vulnerability of others to tuberculous infection, to the small-pox poison &c., and to the very feeble vitality of many children born of parents whose vigour has been impaired by excesses or disease, and which causes them to fall victims to the first devitalising agent with which they come in contact. On the other hand, we have numerous examples of unusual individual or family resisting power to specific morbific agents, and this is still more marked in certain well-defined varieties or races of man and of the lower animals. Thus, the negro, as already mentioned, is less subject than the white man to severe forms of malarial fever and to yellow fever; the Algerian sheep has an exceptional immunity from anthrax; the fatal form of septicæmia in the mouse, which Koch has so well studied, affects only house mice, while field mice are not susceptible to it. But, in addition to these inherited differences in vital resistance to various morbific agents, it is well known to physicians that wide differences in susceptibility to the action of these agents result from influences which lower the individual standard of vitality, temporarily or permanently. Among the most prominent of these influences may be mentioned hæmorrhage, chronic wasting diseases, excessive fatigue, inanition, venereal or bacchanalian excesses, &c. This is shown in a striking manner during the epidemic prevalence of pestilential diseases, which find their victims especially among those whose vital resistance is "below par" from one of the causes above mentioned.

The absolute immunity which certain species of animals have against the infectious diseases of other species is probably due in great part to causes of a different order, and is to be attributed to constant (specific) differences in the chemical composition of the tissues and fluids, and to differences in the normal temperature of the body, &c., which constitute favourable or unfavourable conditions for the development of particular pathogenic organisms. But this is quite a different matter from the relative immunity which results from a single attack of one of the infectious diseases, which may in certain cases be overcome by unusually large doses of the disease poison, by exposure when the general health of the individual is at a low standard—deficient vital resistance of a temporary nature,—or by an unusual individual susceptibility—"idiosyncrasy." There can be no doubt, then, that differences in vital resisting power do exist which determine the development or otherwise of a first attack after exposure to infection in those diseases in which one attack is to a greater or less extent protective; but this does not explain the immunity which follows such an attack. This I believe to be due to an increased vital resistance to the specific disease poison—probably not to the germ, but to the chemical products evolved as a result of its vital activity, and which give it pathogenic power—resulting from a tolerance to this poison acquired during the attack, when it must be present in the system in considerable quantity.

We have numerous examples of acquired tolerance to the action of known toxic agents, and especially to those which *act chiefly upon the nervous system—e.g.*, opium, tobacco, arsenic. And there is evidence that disease poisons produce the morbid phenomena which characterise the acute infectious diseases, in part at least, by their action upon the nervous system. The febrile phenomena, for example, are no doubt largely due to the action of some toxic agent upon the nervous system; and the chemical explanation of fever, which supposes that it corresponds with the rise in temperature observed in a liquid undergoing fermentation, is as crude as is the chemical explanation of immunity. Evidently, if the explanation is correct thus far, the vital resistance of which I speak is a property of the living matter or protoplasm of the body, and resides in the cellular elements of the tissues—nerve cells, gland cells, muscle cells, leucocytes, &c. Now, these cells are not fixtures like bricks in a house, but are constantly being replaced by other cells. Their progeny, which in their turn grow old, die, and give way to younger generations. It is therefore necessary to suppose, in order that this explanation may cover the fact of a continued immunity for many years, that the tolerance acquired during an attack by the cellular elements of the body is transmitted to their cellular progeny through successive generations. This supposition will not overtax the credulity of biologists and of physiologists, for they are familiar with the wonderful power which protoplasm has of transmitting its peculiar vital properties, inherited or acquired, to its offshoots.

The vegetable kingdom furnishes us excellent examples of the transmission of acquired properties through successive generations of cells. Cultivated varieties of fruits and flowers are propagated by slips, buds, or grafts. The cellular elements of each bud or graft are in this case the direct progeny of those in the first cutting, which was selected because of some peculiarity which it was desired to propagate. But if we plant the seed produced by such a bud or slip, we do not obtain the peculiarities of fruit, flower, or foliage which we had preserved by the first mentioned method. In like manner acquired immunity from infectious diseases and acquired physiological or structural peculiarities generally are not transmitted through the reproductive elements of an individual to his offspring, at least not to an extent at all comparable with the transmission of race or family peculiarities. How, then, are these race or family peculiarities established? Darwin has answered this question in a most satisfactory manner for plants and animals in a state of nature. There are congenital differences in the progeny of the same parents which give character to the individual and which are to a greater or less extent transmitted to his offspring. "The survival of the fittest" has a constant tendency to perpetuate advantageous peculiarities, and these are intensified in succeeding generations by the action of the same general law of natural selection. It is by the action of this law that we explain acquired race immunity, as, for example, the superior tolerance of the negro to the action of malaria. Living in an intensely malarious region, a race tolerance has been established for this poison by natural selection and the survival of the least susceptible individuals. In this case we cannot explain the superior tolerance to the malarial poison by supposing that acquired individual tolerance has been transmitted and has become a race character, for the malarial poison is peculiar in that one attack not only does not protect, but constitutes a predisposition to subsequent attacks. I am disposed to explain in a similar manner the marked difference in susceptibility to infectious forms of septicæmia, which is exhibited by carnivorous and herbivorous animals. The herbivora are especially susceptible to these septic germ diseases, which are propogated by inoculation and are known to us mainly by laboratory experiments. It is evident that in a state of nature they are little liable to accidental inoculation with septic material containing the various organisms associated with putrefactive decomposition, and consequently there has been no opportunity for the establishment of race immunity by the survival of the least susceptible. The carnivora, on the other hand, are frequently forced, in a state of nature, to feed upon putrefying animal bodies, and in their battles over such prey must constantly wound each other with teeth or claws smeared with material containing septic organisms. If wolves were as susceptible as rabbits to the forms of septicæmia referred to, it would appear that the species could not long escape destruction. But this is not the case, and I can scarcely doubt that their immunity is the result of the survival of the least susceptible through successive generations; or, in other words, is due to natural selection.

MR. LEWIS W. STEVENS, L.R.C.P. Ed., &c., has been appointed a Justice of the Peace for the district of Robertson, Cape of Good Hope.

ON SOME
SURGICAL ASPECTS OF RENAL TUBERCULOSIS.

BY REGINALD HARRISON, F.R.C.S.,
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TUBERCULAR disease of the urinary organs has recently received considerable attention, and the literature of the subject has been importantly added to by the French school of pathologists. In reviewing urinary tuberculosis it is impossible entirely to dissociate any one part of the system as belonging to the physician, it being now well recognised that certain morbid conditions feign well-marked surgical complaints, and give rise to consequences which are only amenable to surgical interference. The observations I am about to make have been led up to by cases presenting symptom indicating the necessity to explore for calculi or to practise cystotomy for their relief.

Tubercle of the kidney in its earliest form I have frequently found to be a cause of incontinence and urinary irritability in children; many children, especially males, who were suspected of stone, proved to have tubercular kidneys. It is not easy always to determine cases of this kind. In one instance recently under observation, where in addition to medical treatment, circumcision of an elongated prepuce had been performed, extensive renal tuberculosis with almost entire atrophy of one kidney was shown after death to have taken place. In assisting to make a diagnosis between what we may call medical and surgical incontinence, I have found the use of the thermometer extremely valuable in doubtful cases. If there are tubercles in the kidney, the temperature will generally show them, provided the observations are continued for some time, in addition to other indications which it is not my province to enter upon.

Of the various operations employed for the relief of urinary affections it would be difficult to mention one that had given better results generally than cystotomy; the least favourable cases, in my experience, have been those where this operation was undertaken for symptoms traceable to tuberculosis. Of these I might instance several. The following example was a particularly interesting and an instructive one of its kind.

Some years ago a small boy four years of age came under my care at the Royal Infirmary, at the request of Dr. Little, on the suspicion that he had a stone concealed somewhere in his urinary organs. He had many of the symptoms of this complaint, but though he had been sounded several times no calculus could be felt. He was the child of distinctly strumous parents, and was singularly bright and intelligent for his age. Twelve months previously he commenced to wet his bed at night and to suffer from urinary irritability in the daytime. Occasionally very small quantities of blood had been detected with the microscope in the urine, which was invariably acid and opaque. Within two months prior to his admission the urine had been charged with mucus and granular matter containing a few pus cells of a tenacious character, efforts to expel which from his bladder produced much spasm and suffering. To aid micturition, and at the same time with the view of mitigating his spasm, he acquired the habit, which at last became constant, of pulling at his penis. He seemed, as it were, to milk away the urine and what it contained from his bladder. It was under these circumstances he came into the infirmary, when it was found necessary to give him sedatives freely. The urine, always granular-looking and opaque, now and then contained something which seemed more like the white of an egg half boiled than anything else. He was sounded, under ether, but nothing abnormal could be detected by any form of physical examination that was employed. Towards evening he was generally noted to have a rise in temperature, and there was a distinct tendency towards hectic. To alleviate the constant pain and spasm of micturition a median cystotomy was performed, but with little benefit. The spasm and vesical tenesmus still continued almost unabated. In the course of a month the child died with renal symptoms and a gradual suppression of urine. Post-mortem examination showed nothing wrong with the bladder or the urethra. The ureters were dilated and the kidneys cystic and tubercular. Some of the cysts thus formed, communicating with the pelvis of the kidney, contained thick gummy-looking mucus similar to that which was observed in a more diluted form in the urine; the cyst walls seemed to be engaged in secreting this viscid matter, which obviously with some difficulty had found its way along with the urine down the ureters. This was the explanation of the dilated ureters, the bladder spasms, and the irritability which led to cystotomy being practised. Without such an explanation it was difficult to understand how the ureters could be dilated, and yet no stricture exist in the urethra.

This case has since served to illustrate, in connexion with others of the kind not very dissimilar in history, progress, and results, at least three points: (1) That urinary incontinence or irritability in young children may proceed from renal tuberculosis; (2) that though cystotomy gives relief by allowing escape of the viscid mucoid material the tubercular cysts in the kidneys furnish when it has reached the bladder by slowly trickling, or insinuating itself down the ureters, there might in other cases of this kind be more cogent reasons for opening and directly draining the cystic kidneys, with the view of preserving what remains sound in structure as well as of preventing the constant spasm or colic which is aroused by the products of the disorganised kidney forcing a way along the ureters; (3) that such a case serves to illustrate those extremely rare cases (of which but few specimens are known to exist) where stones in the bladder have been found, wrapped up as it were in fibrous or gelatinous envelopes.

It was only comparatively recently, until I had by the kindness of Mr. Bickersteth an opportunity of carefully preserving and examining a well-marked specimen of what these tubercular cysts in the kidneys are capable of pouring along the ureters into the bladder, that I felt it possible to explain the formation of semi-fibrous stones. The best specimen I know of is in the Liverpool Infirmary Museum, and has been there referred to by me on a previous occasion.[1] "In 1873 a boy was admitted into the Liverpool Royal Infirmary, under the late Mr. Long, suffering from symptoms of stone. The child was sounded carefully, but without any evidence of stone being afforded. Death occurred in the course of a few days. On making a post-mortem examination the kidneys were found in an advanced stage of tubercular disorganisation and cystic. The bladder was small, and in it lay a calculus made up of a urate of ammonia nucleus, the size of a damson-stone, surrounded by a thick layer of soft material, consisting of mucus, fibrin, and a little gritty matter, probably phosphatic. The outer covering could be cut or torn easily, and after it had been in spirit it presented on section a laminated appearance, like the fibrinous layers found in an aneurysm. On striking the mass with a metal instrument no ring was produced; hence the impossibility of determining its existence with the sound during life." Mr. Bickersteth records a similar example.[2]

The possibility that in a strumous subject a small stone in the bladder may, as it were, be wrapped up in a fibrous sort of coat furnished by a tubercular kidney must not be lost sight of in the investigation of obscure cases of vesical stone, whether or not the explanation I have offered as to their formation be a satisfactory one.

In the diagnosis of urinary tuberculosis in the adult male, in whom this disease is frequently found between the ages of twenty and forty, the careful examination of the testes and prostate with the finger often furnishes valuable evidence as to the probability of tubercle existing in some other portion of the genito-urinary apparatus which is beyond reach. When such evidence coexists with positive signs of functional urinary irritation in some form or other, further evidence as to the cause of the symptoms is hardly requisite. In all cases where there are grounds for suspicion the testes and prostate should be carefully examined. So far as the testes are concerned, there is nothing to be said in reference to their mode of examination. With the prostate it may be observed that our generally recognised method of examining this gland with the patient on his back or side is a very imperfect one, for whatever purpose, diagnostic or otherwise, it is required. To examine the prostate thoroughly and with the least amount of discomfort both to the patient and the surgeon, the former should be placed with his abdomen over the end of a sofa or on a pillow over the side of a bed, with the legs slightly apart, so that the surgeon may introduce the finger into the rectum with its palmar surface downwards, the patient's abdomen being at the same time pressed backwards and towards the pelvic outlet by the weight of the body on the bed. In this way the most accurate information can be obtained by the finger respecting the size, consistence, and relations of the gland. In urinary tuberculosis in the adult male small rounded bodies like shots, sometimes softened in their centres, can be felt either singly or scattered throughout the gland. This I have often demonstrated in the wards of the Royal Infirmary in connexion with the diagnosis of urinary tuberculosis. In young male children, or in adults where the prostate is immature, and it is difficult to make out accurately with the finger, even under an anæsthetic, the consistence and boundaries of the glands, I generally examine with a slightly flattened smooth staff in the bladder; this furnishes a central point of resistance which renders it easy to detect any structural change by the finger, such as a tubercular deposit. I attach much importance to the examination of the prostate in all cases of suspected tubercular disease of the urinary organs.

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[1] The Surgical Disorders of the Urinary Organs, second edition, p. 231 (with plate of stone).

[2] Observations on Lithotomy. Liverpool Medical and Surgical Reports, vol. i., 1867.

Liverpool.

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.[1]

By GEORGE OLIVER, M.D. Lond.

No. I.—Ten Tests for the Bile Salts, with Demonstration.

The study of the urinary aspect of diseases of the liver is so large, and withal so full of clinical interest, that he who has mastered it merely in outline, cannot well do it justice without devoting a series of papers to the elucidation of it. I, therefore, cannot hope to do more on this occasion and at our next meeting than to provide a sketch of one department—namely, the clinical significance of the colourless central components of the bile in the urine. In this communication I will confine myself to a consideration of the tests which enable us to detect the presence of the biliary salts in the urine, leaving over for the next meeting an outline of the physiological and clinical aspects of the subject.

The urinary derivatives of the biliary salts.—The salts of the bile acids, as they exist in the bile, are taurocholate and glycocholate of sodium, the former greatly predominating. These biliary constituents are not altogether eliminated by the kidneys in the chemical forms in which they are secreted by the liver. When they reach the intestines, they are split up into taurin and glycin on the one hand, and cholate of sodium on the other. The cholate is mainly reabsorbed by the bowels, a small portion only being excreted in the fæces; while the rest is returned to the liver by the portal blood, and is, at least, in part, eventually discharged in the urine. The bile salts, as they appear in the urine, therefore, in all probability, consist of the liver-secreted salts—taurocholate and glycocholate, and of the derived salt—cholate.

The clinical tests hitherto employed for detecting bile salts in the urine are unsatisfactory.—All the works on physiology and on urine refer to Pettenkofer's test—sulphuric acid and cane sugar—or some modification of it, as the only clinical means by which bile acids are to be detected in the urine. However satisfactory this test may have proved itself in the hands of chemists, who have applied it to solutions of the bile acids extracted from the urine, it cannot, I am fully persuaded, claim an analogous position as a mode of direct testing, such as the practitioner requires, for my experience of it as a clinical test has been most disappointing. In delicacy it falls very far short of the clinical needs of the practitioner, and in reacting with other substances besides the bile derivatives—e.g., albumen[2] and other organic bodies—it is apt to mislead the observer. I can, therefore, endorse Dr. Tyson's remarks on this point: "From a perusal of almost all the text-books on Physiology, and even of numerous manuals on the examination of the urine, the student is led to suppose that the detection of bile acids, if present in the urine, by means of what is called Pettenkofer's test, is one of the easiest possible. On the other hand, nothing is farther from the truth, and the fact is that *such detection by the direct application of the elements of Pettenkofer's test to urine, or any other animal fluid, is practically impossible, even if the bile acids are present in considerable amount.* Nor have any of the modifications of Pettenkofer's test, recently announced as clinically available, proved such in my hands, even where the elements of bile have been added to the urine, except where inspissated ox-bile has been used." The italics are Dr. Tyson's.[3] I am disposed to conclude from my observations that Pettenkofer's test does not react directly with the liver-secreted salts, taurocholate and glycocholate, but only so with the derived salt, cholate. Hence, it does not indicate the presence of the biliary salts in fresh ox-bile until it has had time to decompose them, and thus to liberate cholic acid; but it reacts at once, and very decisively, after the bile has been boiled for several hours with caustic potash, a procedure that breaks up the liver-secreted salts, and furnishes the derivate, cholate. This is doubtless the reason why Pettenkofer's test reacts with inspissated, though it fails to do so with fresh bile, for the taurocholate is readily decomposed by boiling only, and the extract is an evaporation product; and, furthermore, why it rarely affords at once a distinctive reaction in jaundiced urines, which are highly charged with liver-secreted salts.[4] The test for peptones, recently introduced by Dr. Randolph, of Philadelphia,[5] may likewise be employed for the direct testing of bile salts, and for this purpose it is delicate; but is unfortunately open to the objection that it reacts equally well with the merest trace of peptone—a constituent often present in small quantity in the urine of hepatic cases, and, moreover, generally in such traces as to be detected with difficulty, and, therefore, cannot always be definitely excluded.

The proposed test is founded on a physiological reaction.—The test I employ for the direct detection of the bile salts in the urine is a purely physiological one, for it is based on a reaction which belongs to the bile itself as it flows into the intestines. When the products of gastric digestion—peptone and parapeptone—which leave the stomach in a state of acid solution, meet with the bile, they are precipitated, as a tenacious layer, all over the villi of the lining membrane of the duodenum.

A solution of the bile salts precipitates acidulated albuminous urine or urine charged with peptone.—The same physiological fact is illustrated outside the body, by acidulating—by means of citric or acetic acid—albuminous urine,[6] or urine charged with peptone, and treating it with a solution of the bile salts, or by ox-bile freed from pigment, mucin, and fat, when the proteid is precipitated. I take a sample of albuminous urine, acidulate it with a citric test paper, and add a few drops of a solution of the biliary salts, and a voluminous white precipitate is observed, just as if I had thrown down the albumen by ferrocyanide of potassium, or by potassio-mercuric iodide. But though like other precipitates of albumen in failing to dissolve when heated, when the bile salts have not been added in excess, it differs from them in this—in vanishing on the addition of acetic acid. This precipitation of albuminous matter from an acid solution is induced not only by the bile salts, taurocholate, and glycocholate, but also by their derivative, cholate of sodium.[7]

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[1] Read before the Leeds and West Riding Medico-Chirurgical Society, April 10th, 1885.

[2] I have sometimes been led to believe that the presence of albumen retards or prevents the reaction with bile acids.

[3] Practical Examination of Urine, p. 91.

[4] Just lately I met with an instructive instance of this fact in a specimen of colourless bile extracted by aspiration from the gall-bladder of a jaundiced patient. I first of all determined the presence of a *fairly* large quantity of bile salts. Pettenkofer's test, however, afforded no reaction within several hours; but, after boiling a portion of the colourless fluid with liquor potassæ, the test afforded the characteristic colour change in a few minutes.

[5] The Lancet, June 28th, 1884.

[6] Physiological writers assert that the bile only precipitates the proteid from the acid solution that enters the duodenum when in the form of peptone and parapeptone, and not when in that of albumen—as when albumen is dissolved by an acid. If this be so in the duodenum, it certainly is not so in the urine. When a solution of bile salts is added to an acidified albuminous urine, the proteid is precipitated, just as in the case of acidulated normal urine artificially charged with peptone.

[7] Observation shows there are three conditions that prevent the reaction between the bile salts and an acidified solution of albumen

Why not employ an acidulated solution of a proteid in order to detect the presence of bile salts, or the derivative of them, in the urine?—Hence, as this reaction is a thorough-going and decisive one, why not utilise it as a means of discovering the colourless bile derivatives that may overflow into the urine? For if these biliary constituents are present, in however small a quantity, they will surely precipitate an acidified solution of a proteid—resembling, in fact, the chyme—when brought into contact with the urine. Experiment and clinical observation have proved such to be the fact.

Acidification is a necessary condition of the reaction.—I add a solution of the bile salts to albuminous urine, and the mixture is seen to be clear,[8] but on letting fall a few drops of acetic acid into it, the albumen at once falls out of solution, and on the further addition of the acid the precipitate dissolves. Then, again, I take equal parts of an albuminous and of a jaundiced urine, and the transparency of the mixed urines is unaffected; but on dropping in a citric test-paper, a cloud of precipitated albumen collects below, with, however, this peculiarity—the coagulated albumen forms a zone just above the bottom of the tube, where, indeed, the urine remains clear, because the large amount of acid concentrated at this part prevents the precipitate from appearing there. In this case the bile salts present in the jaundiced urine precipitate the albumen, as in the preceding observation, the citric acid merely performing the same duty as when employed in the mercuric or ferrocyanic test for albumen. About twelve months ago I encountered a fact in urine-testing which at that time I could not explain, nor could I derive light either from books or from my friends: the same patient, on different days, provided me with various samples of albuminous urine, which were divisible by the action of citric or acetic acid into two classes—one set precipitating freely with the acid, the precipitate insoluble with heat, and the filtrate albumen-free; and the other set unaffected by the vegetable acid. I carbolised a good example of each kind, and set it aside, believing that the explanation would be forthcoming some day or other. On now re-examining these specimens, I find the one that precipitates albumen by the organic acid contains a large quantity of bile salts; while the other has none—or merely a little more than the trace that belongs to normal urine.[9] The precipitant of the albumen was therefore in this case also the bile salts, which remained inoperative until the vegetable acid was added.

I have lately met with several urines of normal reaction, containing albumen and bile salts, in which the proteid was precipitated by merely adding an organic acid. I show you two examples. This dark urine is a jaundiced urine containing albumen; you see how freely the proteid falls on merely dropping into it acetic acid. And this is a specimen containing an excess of bile salts, but no biliary pigment, along with albumen; and you will note in the course of a few minutes that a citric test-paper produces the characteristic zone-like precipitate, leaving the lowest part quite clear. When the precipitate induced by the organic acid is collected, washed on the filter, and dissolved in an acid (such as acetic or hydrochloric), the albumen is freely precipitated afresh by nitric acid, by the picric acid solution, and by other precipitants of albumen, so that it is albumen and nothing but albumen.

Acidified albuminous urine is a test for bile salts in the urine.—I run this diluted albuminous urine, acidified by acetic acid, over a jaundiced urine, and along the plane of contact of the urines a sharply defined white band or zone of precipitated albumen will be noted, a reaction which is indeed very striking and decisive.

(*To be continued.*)

REMARKS ON

NINE CASES OF DEATH BY HANGING

(SIX EXECUTIONS AND THREE SUICIDES).

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(*Concluded from p. 658.*)

As far as instantaneous death and freedom from suffering are concerned, hanging by means of the long drop, with the knot of the rope under the chin, seems effective and humane; but it is not unaccompanied with the danger of decapitation. This actually occurred some years ago in Dublin in the case, I think, of Kilkenny, and was then attributed to the use of an old rope which had lost its elasticity. The ropes used by Marwood were also old and had lost their elasticity, but they were thick, I should say an inch to an inch and a quarter in diameter. That decapitation did not occur was probably due to the thickness of the rope, and more especially to Marwood's long practice, enabling him to judge pretty fairly from a look at the criminal, what length of rope should be given. Yet in one of the cases I witnessed decapitation was almost complete, and it seems marvellous that the small portion of skin by which the head was attached to the body did not give way during the hour the body was left suspended. In another most of the tissues inside the neck were torn through and only the skin left intact, so that there must have been in many cases very narrow escapes from decapitation.

I do not enter on the question or express any opinion as to whether it is expedient or inexpedient, right or wrong, that capital punishment should exist. But surely so long as the penalty of death is exacted it is the bounden duty of the State to see the provision made for executions shall be as perfect as possible, so that they may be rapid, painless, and free from the possibility of mistake. The penalty of death is the heaviest punishment the law can inflict; it is a very terrible one, not alone to the criminal, but to those whose duty compels them to witness it. That any bungling should take place or any delay occur through the inexperience or awkwardness of the executioner, or that through his avarice he should be able to dispense with needful assistance, would be to add great cruelty to the punishment; yet under the present system this is not only likely to occur, but has actually happened. There is no such thing as a public executioner for the kingdom. The sheriffs of Middlesex and London appoint one, but his appointment confers no right outside their jurisdiction. The sheriffs of other counties are not obliged to employ him, and there is no fixed scale of pay. It is simply a matter of bargaining, and a sheriff can employ anyone willing to undertake the duty, and pay whatever sum may be agreed upon. Strange as it may seem, there is no lack of competitors for the loathsome office, and there is no guarantee that a totally unfit and inexperienced person may not be selected, and wretched criminals' sufferings prolonged. It seems incredible an execution should be a matter of bargaining, to be touted for like any other trade, yet so it is. I have myself seen a letter from Marwood asking for a certificate as it would be useful to him in his business. So long as capital punishment exists there ought to be a public executioner, with properly trained assistants, a fixed scale of pay, and the sheriffs ought to be obliged to employ them and no others. Furthermore, when more than one person is to be hanged at the same time, it ought to be rendered imperative that the executioner should have a sufficient number of assistants to avoid delay. The conclusions arrived at by Dr. Haughton, in a paper read before the Surgical Society of Dublin, are in the main correct, except that the fall of ten to fourteen feet is too long. In no case I have seen was the drop more than eight or nine feet, yet in one the head was almost severed from the body.

The three cases of suicidal hanging I have to record

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or peptone—namely, (*a*) an insufficiency of acid, (*b*) an excess of acid, and (*c*) the proteid present in large quantity. The precipitate with an acidified solution of albumen or peptone, or with acidified urine containing either form of proteid, dissolves on adding acetic acid, or a citric acid test-paper, to sixty minims where the bile salts are present below a certain proportion. These facts appear to me to be interesting in connexion with the temporary albuminuria or peptonuria which is confined to the digestive periods, and with the increased elimination of albumen in chronic renal disease which takes place after meals. May not a subacid or a per-acid chyme, or an excess of the ingested proteid, when the bile flow is imperfect, prevent the biliary salts from precipitating—or, rather, from completely precipitating as in health—the albuminoid materials which flow into the duodenum, and thus permit the premature absorption of them?

[8] When the bile salt solution is run upon an albuminous urine, or more especially upon a normal urine charged with peptone, but in neither case acidulated, a delicate zone of precipitated proteid appears, which, however, vanishes on mixing up the solution with the subjacent urine; but the opacity is restored by a citric test-paper, or by a drop of acetic acid.

[9] This patient also on several occasions furnished me with specimens containing peptones in the place of most of the albumen. One of these I also carbolised. On retesting it, I find the peptones still present, with a trace of albumen; and on running over it a diluted solution of acetic acid, there instantly appears a beautiful thick pearly-white zone. Bile salts are present in large quantity.

present some features of interest. In none of them were there any traces of insanity, nor was there anything in their manner or conduct which could have led one to suppose that suicide would be attempted. In only one could any reason for the act be traced.

E. S——, aged thirty-six, was last seen alive at about 1 P.M., when his dinner was served. At 2 P.M. he was found hanging in his cell from the gas-pipe; his feet were about six inches from the floor. The warder who found him cut the body down at once. When I saw him at 2.25 he was quite dead; the body was warm; rigor mortis had not set in. The eyes were half open, pupils moderately dilated. The face was pale and calm. The tongue was not protruded or pushed up against the roof of the mouth, nor was it dark in colour. The fingers were not clenched; surface of body pale; no evacuation of fæces or semen. He had drunk all his soup and eaten part of his bread. He had used his neckerchief as a means of suspension.

T. K——, a strongly built, robust man, aged thirty-seven, was found dead at 6 A.M. hanging by his necktie from his hammock hook. He had been seen last alive at 10 P.M. on the previous evening. When found the body was cold, and he had evidently been dead some time. The body swung clear of the floor, and fæces, evidently passed in the death-struggle, were found on the floor immediately under the body. There was no trace of seminal emission. When I saw the body rigor mortis had commenced in neck and upper extremities. The face was swollen and livid. The right eye closed, the left half open and prominent. The tongue, black, swollen, and protruded, was pressed against the upper jaw; the limbs were livid; the surface of the body was congested and the hands clenched.

T. B——, a lad aged eighteen, had been in prison only a couple of days. He ate his dinner, which was served at 1 P.M. At about 2.10 P.M., after the dinner tins had been removed, he rang his bell and was let out to the closet, where he remained about three minutes and returned to his cell. Ten minutes later the warder, on looking through the trap in the cell door, saw him standing in a curious position against the wall under the window of his cell, which was immediately opposite the door. He at once went into the cell, and found him partially suspended by one of his braces to the chain of his window. He immediately loosened the brace, took the body down and sent for assistance; when found the boy appeared to be quite dead. Professor Lynham, M.D., who lived close to the prison, was sent for at once, and on my arrival at 3 P.M. I found him endeavouring to restore animation, and making use of artificial respiration. All our efforts, however, failed. The face was pale and calm. No prominence of eyes or protrusion or alteration in colour of the tongue, nor escape of saliva from the mouth. Neither was the surface of the body congested, nor were the hands clenched. What was remarkable was the rapidity with which rigor mortis set in: the boy was last seen alive at about 2.20; the body was found partially suspended at 2.30, yet when I saw it at 3 P.M. rigor mortis had commenced in the neck. As, during efforts to restore respiration, the arms were brought down to the sides, the head and neck raised up, and when the arms were extended above the head, the upper portion of the trunk arched slightly backwards—phenomena which rapidly became more marked. The method adopted for self-destruction was peculiar. The cells are heated by hot water, the pipe passing through the cell under the window; the top of the pipe is about six inches from the floor. The window opens on a swivel in the middle, and a slight metal chain attached by one end to the top and the other end to the bottom enabled the occupant of the cell to open or close the window at pleasure. The loop of the chain hung down to the edge of the embrasure of the window, which would be about the level of the boy's neck when standing on the hot-water pipe. The prisoner's braces were made of frieze and lined with coarse calico. The prisoner had stood on the hot-water pipe with his back to wall, passed his brace round his neck and through the loop of the chain of the window; he had not tied it in a hard knot or, I may say, in any knot at all, the ends making merely the first folds of a knot. Whether he then stepped down off the pipe or slipped off will never be known, but when found he was standing on the floor, his back resting against the wall and the brace tightly round his throat. The surfaces of the brace being rough, and the sides of the loop of the chain coming close together under the strain, had prevented the folded ends of the brace yielding, and consequently it held as firmly as a complete knot could have done. Whether the prisoner really intended to commit suicide or only to feign to do so, whether he slipped off the pipe, or that, thinking the fastening would yield sufficiently to allow him to breathe, he stepped off, are conjectures. Taking the entire circumstances into consideration, I believe the intention was to make a feigned attempt, knowing that the result would be his being placed in association in charge of two other prisoners. Experience has shown that when suicide is really attempted care is taken to make secure knots. I am not aware of any case on record in which the ligature round the neck was not tied.

The scientific value of these cases is sadly deficient from the want of post-mortem examinations. The results of suicidal hanging cannot be compared with those of executions, the mode of death being so entirely different; the laceration of the spinal cord, and rupture of the trachea and bloodvessels, preventing engorgement of the lungs and right side of the heart. The appearance, therefore, of criminals after execution cannot be taken as typical of hanging in general. In two of the suicidal cases the appearance was totally dissimilar, although in both the bodies were perfectly suspended. In one, suspension could have only lasted an hour at the outside, probably less; in this case the face was pale. In the other the length of time the body was hanging was uncertain; from the position and size of the hook, and the time taken in making, and the intricacies of, the knots made on the handkerchief, by which it was attached to the hook, it was evident that it was done after daylight had appeared—that is, some time after 2 A.M. The appearance of rigor mortis and the reduction of the temperature of the body led to the presumption that it had been hanging for some hours. The former alone would have been no indication of time; as in the third case, rigor mortis was apparent half an hour after the man had been seen alive. The appearance of the face and body in this case supports the statement that the face is "more often congested, especially in those who have been long suspended."

The third case has more interest in a medico-legal aspect. It confirms the fact, already recorded, that death from hanging takes place very rapidly, even with the feet or other portions of the body resting on the ground. It shows how rapidly rigor mortis may set in and how carefully the mode of hanging ought to be examined, and the means used tested, in all cases where a body is found suspended. Although it is true that in hanging (excluding executions) the presumption is in favour of suicide, yet it may be homicidal, and further, death having been otherwise caused, the body may be suspended after death. If a body had been thus found in any other place with the ligature so incompletely fastened, the presumption would have been in favour of homicide; for *a priori* it would have appeared in the highest degree improbable that a suicide would have been so careless in the arrangement of the noose, or, if he had, it would have seemed unlikely that so incomplete a fastening —only the first fold of a knot passed through the loop—could either have supported the weight of the body, or, without yielding, have borne a strain sufficient to cause death. It would rather have appeared that after death the body had been placed in that position, and that time had failed to complete the knot. Not only was such a supposition entirely out of the question, but I satisfied myself by actual experiment that, with the material used, the arrangement was effectual; for, on placing the brace in the loop of the chain, folded as it was found, and applying a downward strain to the noose thus formed, the sides of the chain came tightly together, which, with the roughness of the material, prevented any yielding and enabled it to bear a weight equal to that of the body. In all three cases the mark of the ligature was distinctly visible on the neck.

Since writing the foregoing two more executions have taken place. In both Berry was the executioner, and his method differs from Marwood's. Although both were single executions, he had the aid of an assistant, who strapped the legs while the executioner adjusted the noose, thus materially shortening the time. Instead of leaving the rope hanging its full length, so that when the noose was adjusted it looped down behind, he coiled the slack of it up under the beam, and fastened the coil with a piece of thread, thus avoiding all possibility of the rope catching under the elbow or foreleg in any way. He also placed the loop under the left ear. In neither case did the coroner consider a post-mortem examination necessary. From an external examination I judged that the vertebræ were separated, but in neither was the separation so marked or distinct as in those executed by Marwood. The faces were deeply congested, the hands were not clenched, and rigor mortis was well marked in both when taken down one hour exactly after the drop fell. My experience leads me to believe that in addition to a proper length of drop, fracture or dislocation of the spinal column and instantaneous death are most likely to be attained by the loop being placed under the chin.

Galway.

THE TREATMENT OF

ACUTE EARACHE BY THE INJECTION OF GLYCERINUM ACIDI CARBOLICI.[1]

BY H. BENDELACK HEWETSON,
OPHTHALMIC AND AURAL SURGEON, GENERAL INFIRMARY, LEEDS.

OF late years the use of various forms in solution of carbolic acid has been so universally prevalent in modern antiseptic surgery that many, as it were, hidden virtues have, by constant familiarity with the drug, become patent, as well as that the cautionary mirages which naturally always arise on the introduction of a new drug have been paled into insignificance before the light of experience. The anæsthetic properties of the drug are now much more fully understood and appreciated than they were some few years ago, although a solution of carbolic acid, short of being caustic, was well known to have local anæsthetic as well as antiseptic properties. Any surgeon who has worked for a long time at an operation such as ovariotomy, for instance, must remember his lack of tactile power when he went to his next meal. I myself have frequently dropped my glass, my tactile corpuscles having become temporarily and locally anæsthetised from constant immersion in the solution of carbolic acid which is used for instruments. In nearly all operations (the removal of a breast, for instance) the glycerinum acidi carbolici is applied to the wound to stop the after-smarting, and this it does effectually. Then arose the application of the glycerinum acidi carbolici to the exposed nerve in toothache. The relief is absolutely instantaneous if the tooth-pulp is exposed, the patient passing from the severest pain to that of a state of bliss, which all testify to who have experienced relief from toothache. I must here, in passing, just allude to the fact that when earache is due to toothache, which it is in a large number of cases, this application of the glycerine and carbolic acid cures the earache by relieving the toothache.

It is now about seven years since a patient came to me saying that his little boy of five years of age had, within the previous three hours, developed acute earache, and that his temperature was above 100° F. The temperature had been taken by his mother, and was rising. The thought occurred to me, why not inject glycerine and carbolic acid into the ears, as it was evidently a case of inflammation of the middle ear, which would eventually end in perforation and relief, as it had in this child done several times before. I injected this solution of carbolic acid and glycerine, and, to my great delight, it acted as in toothache, almost instantly relieving the acute pain. This was done at three in the afternoon, and the next morning the boy was perfectly well, and heard nearly naturally, though not quite, as he still had a cold. The tympanum never became perforated, as it had done on previous occasions, and the temperature rapidly fell to normal. This is a typical case, and I may say that I have repeated it times without number in the same way, both in children and adults—that is, in earache and in catarrhal otitis. In all cases of this kind, at whatever stage it is applied for earache, it invariably stops the pain; and I feel sure that in many cases, even when perforation seemed imminent, the relief from the pain diminished the tension, and by its strong antiphlogistic as well as anæsthetic power perforation has been avoided. If an earache returns, as it does sometimes, where a perforation has taken place and has again closed, the application of the glycerine and carbolic acid gives great relief, and stops the tendency to recurrence to the same thing in some cases, but not in all, although it always relieves pain, and thus constitutional disturbance. In cases of earache from periostitis, either in cases of chronic otorrhœa or in uncomplicated cases of inflammation of the external auditory meatus, the relief to the pain is not so rapid; but if the carbolic acid and glycerine be allowed to remain in the meatus, then relief from pain is obtained in from ten to thirty minutes. It occasionally returns in these cases, when the solution can be reapplied with renewed benefit. By this means I am convinced, by a large experience extending over some years, that if the treatment is used early, perforation of the tympanum can be stayed in many cases. Of course the tendency to catarrh, or other causes which make a patient prone to otitis, is not the object of this paper, nor also is the after-treatment of such cases where the otitis is got rid of. I am dealing only and solely with earache, and the circumstances immediately surrounding it. I may say that I am not only relating my own experience of the treatment; but, in consequence of a paper which I read before the Yorkshire Medical Society, it has been quite generally used by medical men in the north of England who have reported their experience to me. There is one way in which it may fail to relieve pain at once, and that is in case it is poured too quickly into the external auditory meatus, when the patient has his head aside, with the lobe of the ear in its natural position. In this way the air cannot escape sufficiently freely, and a bubble of air prevents the fluid from reaching the bottom of the meatus. The proper way is to draw the lobe of the ear forcibly upwards and backwards, as in syringing the ear, to straighten the entrance to the meatus, and then allow the fluid to trickle gently down one side, whilst the air escapes up the opposite side. In cases where the meatus is very swollen at its orifice, I have injected the solution up a fine elastic catheter well covered with vaseline to promote its easy passage, and in this way I have relieved earache when it could not have been alleviated except by a hypodermic injection of morphia or such means.

I have taken great pains to arrive at the best strength of carbolic acid and glycerine to attain these results, and I find that weaker solutions do not cure the pain so rapidly or effectually. If weaker solutions are used, they will be found to fail in attaining the same results, and of course stronger solutions would soon become caustic. The glycerinum acidi carbolici in this form is not strong enough to be caustic, and can be applied in severe earache when a perforation exists quite harmlessly.

I have a further suggestion to make as to the applicability of this treatment; but I am only able to support my suggestion by a few successful cases which have come under my own observation. I refer to this application as a means of checking the disastrous otitis in scarlet fever, as well as to relieve the earache in these cases. I am very hopeful on this point; for in one or two instances where I had an opportunity of applying the glycerine and carbolic acid, when a patient first complained of earache in scarlet fever, and the membrana tympani had begun to redden, the relief to pain was immediate, and no perforation took place.

I make the suggestion, and hope all who have the opportunity will try it, since one important (very important) element, I take it, to anyone, much more to a patient in high fever, is the immediate relief from local pain, which must act as a beneficent element in assisting the patient through his illness.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of this Society was held at 53, Berners Street, on April 8th, Mr. Tegart, V.P., in the chair. Six new members were elected, and the death of one reported. Applications for grants were read from sixty-three widows, nine orphans, and three recipients of grants from the Copeland Fund, and a sum of £1349 was recommended to be distributed among them at the next quarterly court. A fresh application for grants was made by a widow on behalf of herself and daughter, and grants were made them. Mr. Henry Lee and Mr. Cooper Forster were nominated for election as vice-presidents at the annual general meeting, in the place of Mr. Cæsar Hawkins and Sir Erasmus Wilson, both deceased, and the following gentlemen were named as directors to fill the vacancies arising from the retirement of the six senior, and from the death and resignation of others—viz., Mr. Hogg, Dr. Barker, Dr. F. Roberts, Dr. Broadbent, Dr. Ogle, Dr. Duka, Mr. Bennett, Mr. J. S. Turner, Mr. Stokes, and Mr. Latham. The annual general meeting was fixed to be held on May 20th at 5 p.m.

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[1] A paper read before the meeting of the International Otological Congress, Basle, Switzerland, September, 1884.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

ST. THOMAS'S HOSPITAL.

A CASE OF LITHOTRITY; REMARKS.

(Under the care of Mr. Clutton.)

The following case of lithotrity with prolonged manipulation is a good example of the method of procedure introduced by Bigelow in the year 1878, which he prefers calling litholapaxy, but which retains the name of lithotrity in this country. In this case the amount of débris produced was such as to render its removal at one sitting impossible, without exposing the patient to unnecessary risk, the remainder being removed seven days later without any inconvenience having resulted to the patient in the meanwhile, whilst the good effect of the first operation was well marked. The stricture, which had been carefully dilated, does not appear to have interfered with the progress of the operation, nor to have caused after-trouble.

R. R——, a coachman, aged forty-nine, was sent to Mr. Clutton by Dr. Phillips of Bromley, Kent, in the autumn of 1884. For eight months he had suffered from frequency of micturition; and during the latter part of this time had begun to feel pain at the end of the penis after emptying his bladder. The frequency in passing urine troubled him as much during the night as in the daytime; so that it is open to question whether this particular symptom was not due to the presence of a stricture from which he had suffered for fourteen or fifteen years. He had of late neglected the stricture, and thought that all the symptoms were due to this neglect. He had during the last three or four months noticed blood occasionally in his urine, which had at the same time become thick and ropy. The pain at the end of the penis and an occasional presence of blood in the urine made it probable that there was also a stone in the bladder. A No. 6 silver catheter was with difficulty passed through a stricture at about four inches from the orifice of the urethra. A small-sized sound was then introduced, and a vesical calculus detected. He was therefore admitted at once into the hospital. In the course of a fortnight the stricture had been so far dilated as to admit a steel sound of the size of No. 30 of the French scale. But the symptoms of irritation in the bladder had been much aggravated. He was passing urine almost every half hour, and had to keep a "slipper" constantly in bed. There was also a large quantity of pus and mucus in the urine that he evacuated. It was determined, therefore, at once to give him relief by lithotrity.

On Oct. 15th, 1884, the patient being brought under the influence of an anæsthetic, a Bigelow's lithotrite was introduced and the stone seized. It proved to be about two inches in diameter, but of soft and crumbling consistence. It was therefore very easily crushed, but the amount of débris produced was so large, and the stone had broken up into so fine a powder, that even at the end of an hour and a half a considerable amount was known to be left behind. The weight of the fragments removed at the operation after careful drying was 659 grains, or a little over an ounce and a half; but no great care was taken to preserve all the fluid that came away, so that a good deal of the fine powder was lost.

On the 17th, two days after the operation, he said that he felt better than he had done for some months. He had no pain except some slight scalding in passing urine, and this was accomplished about once in two hours, instead of every half hour. Altogether the relief was very great. The urine also was quite clear, containing only a few fragments of the crushed calculus.

On the 22nd an anæsthetic was again administered and the bladder washed out by Sir Henry Thompson's improved evacuator and a No. 18 cannula, which had been used at the first operation. The second operation lasted about three-quarters of an hour, and the fragments, dried and weighed, amounted to 336 grains. The bladder was again washed out in the same way on the 30th, but very little débris indeed came away.

The patient left the hospital perfectly well on Nov. 4th. The stone was entirely composed of phosphate, and therefore very light for its size; but when thoroughly dried, the total weight of the fragments removed by the evacuator, with those passed in the intervals, was 1026 grains, or 2 oz. 151 grs. The original calculus must therefore have been of considerable size.

Remarks by Mr. Clutton.—This case is of interest on account of the large size of the stone, the few symptoms to which it gave rise, and the very short time that these symptoms had existed. There was, moreover, a stricture of the urethra, which increased the difficulties of the case.

LIVERPOOL ROYAL INFIRMARY.

CASE OF DISLOCATION OF THE SHOULDER, REDUCED AFTER ABOUT SEVEN WEEKS, AND FOLLOWED BY ANEURYSM (SUBSCAPULAR?), TREATED SUCCESSFULLY BY LIGATURE OF THE SUBCLAVIAN; REMARKS.

(Under the care of Mr. Rushton Parker.)

This case is very interesting as an illustration of a rare accident following the reduction of dislocation of the humerus. The patient was not of an age when one expects degeneration of the vessels, and the dislocation was a comparatively recent one, apparently requiring no excessive force for its reduction. The aneurysm probably followed laceration of the dorsalis scapulæ artery, as suggested by Mr. Parker, and this may possibly have been injured at the point where it turns round the axillary border of the scapula, at which point it would be most exposed to injury during the necessary manipulations.

A woman, aged thirty-six, fell and injured her right upper limb in the first week of December, 1882. To the medical man who attended her she only complained of her forearm, in which he found a fracture, and treated it successfully. Four weeks later, her forearm being nearly well, she went to the Liverpool Royal Infirmary, complaining of her shoulder and general lameness and pain in the limb. On examination the head of the humerus was found dislocated, the limb somewhat œdematous, and the injured forearm satisfactorily healed without deformity. After two attempts at reduction under ether, with the heel in the axilla, by Mr. Harrison's house-surgeon, the case was placed under the care of Mr. Rushton Parker, who is indebted to Mr. Harrison for the opportunity of attending it. Again, under ether, reduction was attempted on Jan. 23rd, 1883. The patient was laid on the operating-table, having a roller towel passed round her chest on the affected side, and looped at the other end to an adjacent iron post, being put on the stretch between. This maintained her fixed while the limb was submitted to linear extension at an angle of about 60° from the trunk. At first the hands of those employed slipped off the œdematous limb, on which another roller towel was hitched on the limb, and steady traction kept up by three or four students, while Mr. Parker directed their movements, clasped the head of the bone, and kept it outwards, while the arm was brought to the side. After prolonged efforts, without any jerking, the bone was found replaced in its proper situation without any indicating sound or perceptible movement at the moment of reduction. The wrist was slung to the neck, with the elbow flexed, and the patient was put to bed. Some ecchymosis resulted and pain in the shoulder, neither more nor less apparently at first than at the previous attempts. But the pain continued; and on viewing the shoulder from time to time to ascertain the cause, there was noticed on Jan. 29th a pulsating swelling over the axillary border of the scapula behind. The pulsation was distensile; the swelling evidently communicated directly with an artery, and its size was about that of a small walnut, with additional induration around. The radial pulse was unaltered on this side, and during the period in which it was examined the position of the aneurysm was more and more conspicuous at the border of or outside the axilla, and near the situation of the dorsal scapular artery or the subscapular at the junction of the two. The swelling under rest in bed did not show any sign of diminution, but rather of increase; it was attended by severe neuralgic pain, that greatly distressed the patient, who could hardly sleep. At a consultation with his surgical colleagues, Mr. Parker's proposal to tie the subclavian artery was agreed to. This was accordingly done on February 16th, 1884, under ether, with Lister's carbolic acid method and a chromicised catgut ligature. After the skin incision and the closure of its vessels, the fasciæ were divided with two pairs of dissecting forceps, the successive apertures being held open by Mr. Harrison with a pair of artery forceps in each hand. The artery was too deep to thread the aneurysm needle after passing it, so the needle had to be withdrawn and passed threaded. Pulsation ceased at once on compressing the artery against the finger with the ligature, so the latter was tied, cut short, and the wound sewn and drained, being covered with a Lister's gauze dressing. Union by first intention resulted without inconvenience or complication. The blood tumour that had pulsated remained for weeks unreduced in size, and felt so soft that Mr. Parker was tempted to aspirate it. This failed, as the blood was clotted, though soft. Eventually a puncture was made on March 10th, under a stream of carbolic lotion, and some black clot squeezed out. Decomposition eventually occurred, but was quickly corrected by carbolised washing, and entire cicatrisation resulted. The patient was kept in hospital all the summer, her arm being slung the whole of the time, and the stiffness of the shoulder gradually becoming slacker. She was lost sight of, and when sought in April, 1884, could nowhere be found.

Remarks by MR. PARKER.—Six weeks after an accident one would hardly expect reduction to be so difficult as in this case. The parts were, no doubt, stiffened by the previous attempts, and all rendered difficult by inflammatory stiffening, which may have resulted from her own neglect of the injury, due to her ignorance of its existence and the omission of remedial precautions. The pulsating blood-tumour was a good example of circumscribed traumatic aneurysm that results from arterial rupture subcutaneously. It certainly did not appear to communicate directly with the axillary trunk, and was thought likely to be subscapular or dorsal scapular both from position and behaviour. Under any circumstances this must be a rare situation for aneurysm, though perhaps more likely to follow a stab than any other predisposing cause.

THE FRENCH HOSPITAL.

DISLOCATION OF THE FOREARM, OF EIGHT WEEKS' STANDING; REDUCTION; REMARKS.

(Under the care of Sir W. MAC CORMAC.)

FOR the following account we are indebted to Mr. Alfred S. Gubb, resident medical officer.

Léon P——, aged twenty-four, a musician, on Dec. 23rd last, was returning home late at night, carrying a parcel in each hand, when he was assaulted and knocked down quite unexpectedly. On rising he found himself unable to use his right arm, and any attempt to move it was attended with much pain. The next day he went to a neighbouring hospital, the arm being then very much swollen, where the case was diagnosed to be one of fracture just above the elbow-joint, and the limb was put up in an external angular splint reaching from the shoulder to the wrist. He returned to the hospital several times subsequently, but the arm was left undisturbed, until, being dissatisfied, he went on Feb. 9th to the French Hospital, where the splints were removed and the limb examined by Sir William Mac Cormac, who found a dislocation of both bones of the forearm backwards and slightly outwards. The patient was put under an anæsthetic and the adhesions broken down by flexion and extension movements, and efforts made to reduce the displacement by these and counter-extension. It was, however, only after three-quarters of an hour of very energetic manipulation that reposition was effected. The limb was then put up in fully flexed position, and secured by a plaster-of-Paris bandage. A good deal of swelling and pain followed, which were subdued by the continuous application of the icebag and the administration of opium. The limb was left in this position for a fortnight, and then passive movements were cautiously resorted to. A good deal of stiffness of the elbow and fingers remained, but after another fortnight of massage and passive movement the patient was enabled to extend the arm about forty-five degrees beyond a right angle, and to use his fingers with some amount of comfort. He left the hospital for Paris with every prospect of a useful limb.

Remarks by SIR WILLIAM MAC CORMAC.—Dislocations of the elbow are rare in adults, and in this case the interval was nearly the limit at which a successful reduction can be accomplished. Further, it serves to illustrate the difficulty of diagnosis in injuries to the elbow when the relations of the part are concealed by swelling.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Aneurysm of Abdominal Aorta treated by Distal Compression.—Localisation of Motor Centres in Spinal Cord.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair.

MR. T. R. LUNN and DR. F. L. BENHAM read a paper on a case of Aneurysm of Abdominal Aorta treated by Distal Compression. The patient, a man aged thirty-two, a shoemaker by trade, was admitted into the Marylebone Infirmary, in October, 1883, with a large abdominal aneurysm. He had been in the army nine years, and had syphilis five years ago. There was no history of strain or injury. The urine contained a slight trace of albumen. The patient was not relieved by the usual remedies, including rest, low diet, narcotics, &c. He was evidently getting worse, and was extremely anxious to have some operation done, the danger attending which was explained to him. On October 31st the patient was placed under the influence of chloroform, and compression of the abdominal aorta just above, and to the left of, the umbilicus was kept up four hours and three-quarters with Carte's tourniquet. There was slight vomiting on the first and third days after the operation (apparently due to the morphia and chloroform combined), but otherwise the patient expressed himself as feeling better; the tumour was smaller, harder, and pulsation less marked. The man continued to do well for seven days, but on Nov. 8th persistent vomiting set in, chiefly of a dark grumous material. The pulse was feeble, 192; there was intense thirst, no abdominal distension or pain, some dulness over right lung, the face was congested, and the feet warm. The patient became worse, and died on November 10th, the eleventh day after the operation. At the autopsy the aneurysm was found to be cured, but there was gangrene of about two feet of the jejunum.

MR. HENRY MORRIS contributed a paper on a case of Gangrene of the Right Lower Extremity, due to an aneurysm which was full of laminated clot, and therefore practically cured. The patient was a man aged thirty-eight, who on December 27th, 1884, suddenly felt, whilst walking, severe pain, numbness, and pricking in the right leg, accompanied by profuse sweating; the left leg was also affected in a less degree, but the mobility and sensibility of the left lower limb returned, though the right remained paralysed and without sensation. On January 1st the patient was admitted into Middlesex Hospital. There was a history of syphilis sixteen years previously. Six months ago he had had lumbago, and later on drowsiness and throbbing of the right temple. On admission there was gangrene of the right lower limb; the femoral artery could not be felt. Some weakness and coldness of the left foot were present. On the right side of the abdominal parietes the veins were greatly distended. It was decided to wait before amputating the gangrenous limb. On January 14th the right limb was amputated through the lower third of the thigh by the circular method; a feeble, tiny stream of blood flowed from the superficial femoral artery. The eighth day after the operation the man died; delirium and diarrhœa had been present, and the urine was albuminous. At the autopsy the intermuscular planes of the stump were infiltrated with badly smelling sanguineous fluid. There was an infarct in the liver, and this organ weighed 71 oz.; the kidneys were swollen, and weighed 7¼ oz. each; in the right kidney there was an infarct. Atheromatous patches were present in the aorta, and an oval aneurysm, full of laminated clot and two inches and a half in length and of the size of a Tangerine orange, was found close to the superior mesenteric artery, which, however, was not involved. The bodies of the first and second lumbar vertebræ were eroded. The blood-clot extended into the aorta. Just above the right profunda artery there was an embolus. The vena cava inferior was completely blocked, as were also the common iliac veins. The case was brought forward chiefly to show that even an aneurysm which had been cured by nature could by accident cause the death of the patient.

Mr. R. Barwell said that it was unfortunate that the paper should have confounded proximal and distal compression for the treatment of abdominal aneurysm. There were now four cases of treatment by distal pressure; in two no benefit and no injury resulted. In Mr. Bryant's case the intestinal injury was the cause of death, just as it was in Mr. Lunn's case. He doubted whether the soft spongy clot occurred as the result of pressure, or as the result of arrest of the circulation during the last moments of life.—Mr. Bryant said that in his case of distal compression he thought he could, with justice, attribute the clot in the aneurysm, not to a recent formation, but to one which had been formed slowly during the compression of the aorta. He considered that Mr. Lunn's case was an encouraging one for the treatment advocated. He asked for further particulars as to the precautions which were taken in applying the tourniquet.—Mr. T. Holmes said it was open to doubt whether the treatment ought to be described as distal pressure; for there was but little space between the terminal portion of the aneurysm and the bifurcation of the aorta; it was more likely that there was direct compression of the aneurysm. He thought that distal compression was not likely to cure the aneurysm, but more likely to kill the patient. There were so many sources of collateral circulation that a cure was almost impossible. The risk of rupture of sac was great. He was inclined to think that in Mr. Lunn's case there was a genuine tendency to the cure of the aneurysm, for it had the appearance of being firmly consolidated; but he thought that this consolidation was not the result of distal pressure on the aorta.—Mr. Hulke concurred with the remarks of Mr. Holmes, and doubted whether the exact seat of the pressure could be definitely asserted, even when it was supposed to be applied proximally. In two out of three cases which had been under his observation there was direct pressure on the aneurysmal sac. The result in all his cases was successful, and the aneurysm was consolidated. Nevertheless, the dangers were great, and considerable risk must be run.—Mr. H. Morris spoke of a valuable contribution to the subject made by Mr. Barwell to "Ashhurst's Encyclopædia of Surgery." There were ten cases in which proximal pressure had been used, with recovery in five cases and death in five cases. Death was due to bruising of the intestine and peritonitis. It was a question as to how far the intestinal injury was due to direct pressure on these structures or to embolism of the superior mesenteric artery. He would like to know what chance there would be of gangrene of the intestines when the superior mesenteric artery was occluded. We had to do with the same dangers whether proximal or distal pressure were employed. He spoke on a subject to which he had already drawn attention—viz., that aneurysms may be cured by nature and yet bring about the death of the patient. His own case proved this, as did also a case of aneurysm of the ascending aorta in which consolidation had taken place; but a minute rent formed, through which leaking into the pericardium took place and caused death.—Mr. *Jonathan Hutchinson* doubted whether medical treatment was wholly powerless to cure cases of abdominal aneurysm situated high up on the aorta. He referred to a case of his reported in "Holmes' System of Surgery," in which the free administration of diacetate of lead to the degree of producing a blue line on the gums and lead colic was carried out, together with the use of ice-bladders over the abdomen, a dry diet, and absolute rest. In this case within three months there was a complete cure, and the man went to work. He agreed with Mr. Holmes that there was a very great risk of causing the death of the patient by the method of distal compression. In ergot of rye, diacetate of lead, and iodide of potassium we had powerful drugs which might be used in combination, and which were able to exert a very important influence on the state of the blood and arterioles.—Mr. J. R. Lunn, in reply, said that before the tourniquet was applied the bowels were thoroughly emptied, and the bladder also. Gradual pressure was made after the skin and tourniquet had been properly dusted with powder. Carte's tourniquet was a very convenient one. The patient was a most restless man and difficult to keep at absolute rest, though this and large doses of iodide of potassium had been attempted for a period of one month without benefit.—Dr. Benham, in reply, quoted some references to prove that embolism of the branches of the superior mesenteric artery could cause gangrene of the intestines. He was of opinion that the pressure of the tourniquet was distal and not immediate.

Dr. C. E. Beevor read a paper on two cases illustrating the Localisation of Motor Centres in the Brachial Enlargement of the Spinal Cord. The first case was one of progressive muscular atrophy, occurring in a goldbeater and lamplighter, aged thirty-eight. The disease commenced three years ago, with gradual wasting and loss of power, beginning in the muscles of the back of the right forearm, the muscles of the hand and the interossei, and involving other muscles of the right arm. The left arm was affected a year later, with difficulty of supinating the forearm, flexing the elbow, and abducting the shoulder-joint. The legs have been weak for the last six months. At present the muscles most affected on the right side are the small muscles of the hand and interossei, the flexors and extensors of the wrist and fingers, the teres major, serratus magnus, deltoid, biceps, brachialis anticus, supinator longus, rhomboid, and teres minor. On the left side the same muscles are affected, except the small muscles of the hand and the flexors of the fingers; while, in addition, the clavicular part of the pectoralis major are slightly affected, and the supra- and infra-spinati are involved. The second case was that of a young man aged eighteen, suffering from infantile paralysis. The onset was sudden when the patient was a year old, with paralysis of all four limbs, of which the legs and right arm have recovered fairly well, while the left arm has remained more paralysed. At present, in the right arm, the only muscles affected are the latissimus dorsi, triceps, and pectoralis major, the sternal part of which is absolutely gone. On the left side, in addition, the teres major, subscapularis, rhomboid, supra- and infra-spinati, and teres minor are severely affected; while the extensors of the fingers, serratus magnus, and deltoid are only slightly involved. There was nothing of great importance in the course of the two cases; but they were brought forward to illustrate clinically the groups of muscles found by Professors Ferrier and Yeo to be thrown into action by faradising the peripheral ends of the divided anterior motor roots forming the brachial plexus. These groupings were shown in some tables, and side by side with them were given the muscles found to be affected in these two cases. On comparing the cases, it will be seen that whereas in the case of progressive muscular atrophy the groups of muscles severely or completely affected belong chiefly to the fourth, fifth, and eighth cervical and first dorsal nerves on the right side, and mainly to the fourth and fifth cervical nerves on the left side, in the case of infantile paralysis the opposite holds good, for on the right side the only muscles affected (the triceps latissimus dorsi and pectoralis major) are innervated, according to Ferrier and Yeo, only by the sixth and seventh cervical nerves, whilst the rest of the groups are unaffected; and on the left side the sixth and seventh cervical nerves are most affected, and also some muscles innervated by the fourth and fifth cervical are partially paralysed. The reaction of the muscles to electricity (faradisation and constant current) has been ascertained, and they correspond to the degree of power lost and to the amount of wasting, and are quite in accordance with the above groupings. A third case of infantile paralysis was also described affecting the muscles of the right arm, corresponding to the sixth and seventh cervical only—viz., teres major, latissimus dorsi, subscapularis, pectoralis major (sternal half), triceps, and serratus magnus. It should be remarked that Ferrier and Yeo's experiments were made on the motor roots, but it is considered that the groups of muscles thereby differentiated can be equally applied to the cells of the anterior cornua supplying these nerves, and these cells are known to be affected in progressive muscular atrophy and infantile paralysis.—Dr. Hughlings Jackson said that Dr. Beevor's observations were an example of a kind of work that was much wanted. Ferrier's experiments gave us some clue to the nature of the mixing up of the nerves at the level of the lowest centres. Lesions of the cervical region of the spinal cord were known to have an influence on the pupil. In these cases the pupil was small and unable to dilate when the eye was shaded. Stabs of one half of the cord illustrated this, as did also cases of rupture of the brachial plexus. Ferrier's experiments were more definite in this regard, for they showed that it was only the second dorsal motor root in the monkey which contained the dilating fibres of the iris. Stimulation of this root causes dilatation of the pupil and contraction of the intrinsic muscles of the hand. In a case of progressive muscular atrophy under his care the intrinsic muscles of the hand were affected, and there was smallness of the pupil on the same side, and inability of the pupil to dilate when the eye was shaded, thereby affording a clinical corroboration of the experimental work. A case of Mr. Rivington's also bore out the same fact.—Dr. **FERRIER** said it was important that his and Yeo's experimental observations had been corroborated and verified by clinical research of so laborious a kind as that which Dr. Beevor had undertaken. The intricate plexiform arrangement of the brachial and crural nerves had long been a physiological puzzle, and his experiments were undertaken with a view to clear up the mystery. He and Yeo had found that each root of the brachial plexus of the monkey answers to a distinct and well-defined muscular action due to coördinate contractions and relaxations of groups of muscles. It was most probable that centres of complex coördination existed in the brachial enlargement of the spinal cord. Stimulation of the cervical nerves going from the upper part of the brachial swelling gives rise to a combined and coördinate movement in which the deltoid, biceps, brachialis anticus, and supinator longus muscles took part, as in the act of raising the hand to the mouth. He referred to some observations in human anatomy made by Dr. Cunningham, which showed that twenty-seven out of thirty-seven subjects examined the second dorsal nerve sent a contribution to the brachial plexus. If this relation were found to hold good, then there would exist a complete harmony between the nervous relations of the brachial plexus in man and monkey. It was important to decide whether the nuclei of all the muscles were present in each segment of the brachial swelling or whether they were arranged in a linear order. In his opinion the facts of anterior poliomyelitis seemed to show that in each segment we have the nuclei of all the muscles. Neurologists had come to recognise an upper arm type and a lower arm type, and he believed that there were as many distinct types as there were groups of muscles. In the middle of the brachial enlargement there was a coördinating centre which presided over the latissimus dorsi and pectoralis major and the rotators of the shoulder-joint. It was highly probable that in the spinal cord there were mechanisms for the carrying out of complex coördinate actions, and he believed his experiments had roughly mapped out the chief of these mechanisms.—Dr. **BEEVOR** said that in one of his cases the right pupil did not dilate when shaded, and so resembled the instance of which Dr. H. Jackson had spoken. In this case the first dorsal nerve supplied the group of affected muscles, and therefore still further corroborated the views of Ferrier.

CLINICAL SOCIETY OF LONDON.

Amputation at the Hip-joint.—Pityriasis Circiné.

AN ordinary meeting of this Society was held on April 10th, Mr. Thomas Bryant, F.R.C.S., President, in the chair. There was a well-sustained discussion on the surgical papers.

Dr. **LEWIS W. MARSHALL** read a paper on Amputation at the Hip-joint by Furneaux Jordan's Method. The author, in giving a record of ten amputations at the hip-joint by this method, mentioned at the outset the fact that a paper had been previously published by him in the *British Medical Journal*, October 27th, 1882, on the same subject. He likewise mentioned that Dr. Maclaren of Carlisle also read a paper in Edinburgh, which was published in the *British Medical Journal*, June 7th, 1884. He gave a brief account of the two methods of operating suggested by Mr. Jordan in THE LANCET, March 23rd, 1879, stating that he himself preferred the second method, which was done by making the circular sweep through the soft parts first, the enucleation of the femur being the second step. Of Dr. Marshall's ten cases, three were done after excision, and the remainder when this operation could not be practised on account of extensive implication of the femur or pelvis, or from the general condition of the patient prohibiting more conservative measures. The ages of the patients were as follows: two at eleven, one at ten, two at eight, two at seven, one at six, one at five, and one at three years. In all but one the fingers were used to compress the femoral artery in the groin. Esmarch's bandage and Davy's lever were spoken of, and had been used, the latter in the only case which has to be recorded as a death in this list. This death occurred within a few hours after operation from shock, the result of loss of blood. The amputation was on the right side. The patients are living and well, with the exception of two. These deaths were due to visceral lesions. The dressing used in each case was a loose antiseptic covering of carbolic oil and lint. Stress was laid upon the after-treament of the patient. Food was withheld by the mouth for some hours, if iced champagne be excepted, nutrient enemata being given instead. An extract was read from Mr. Jordan's paper, detailing the advantages of his method over the older flap operation. The reason given for the choice of the second method of operating was as follows:—"That the increased length of leverage gained by freeing the limb from the main attachment of the muscles enables the fingers and the knife to pare the muscles off from the bone with much less risk of wounding vessels unnecessarily." It was also stated that the separation of the tough bands which in old-standing cases of hip disease weld the trochanter and what exists of the neck of the femur so closely to the pelvis is rendered easier and more rapid. The fact of the gluteal vessels remaining untouched was insisted on. Dr. Marshall also spoke of the possible risk to the patient when disease was present in the pelvis by the use of Davy's lever. The use of this instrument appeared to be undesirable, because the efficacy of the nutrient enemata might be interfered with. Mr. Wright, Senior Surgeon to the General Hospital, Nottingham, controlled the common femoral. The hand in the groin for this purpose was in no way a hindrance to the operator. The femoral artery was always tied after the circular incision was made. The stump left by Jordan's method was said to be all one could wish for. A case in which albumen in the urine had been present for some time, and where the liver was enlarged to the umbilicus, is now living and well. The albumen could be found up to ten months after amputation. In two other cases large deposits of albumen were present when amputation was done.

Mr. **JONATHAN HUTCHINSON** read a paper entitled a Plea for Amputation at the Hip-joint in certain Cases of Advanced Suppurative Disease. The author commenced by stating that he had no new method of treatment to recommend, but simply the more liberal adoption of an old one. He believed that not a few cases of advanced suppurative destruction of the hip-joint would be more safely treated by amputation than by excision or by rest; especially did this remark apply to cases in which the limb was diseased at other parts, and damaged as regards its usefulness. He included also some which after excision were not doing well. In all cases in which such conditions existed, he felt sure that the surgeon would do well to remember that amputation at the joint was usually very successful even in cases of extreme exhaustion. It was also usually followed by rapid restoration to good health. The difference between operations for disease and for tumours was very great. The former were attended by obvious relief from the very first, the latter not unfrequently by severe shock. Bearing this in mind, he felt sure that it was often a mistake in practice when open suppuration was established, and the patient's strength failing, to delay or decline amputation at the hip-joint. In looking back in his own practice he recollected several cases in which he much regretted not have done so. In such the patient was always in danger of the development of lardaceous disease, as well as in risk of his life from hectic or some intercurrent malady. Particularly in adults is the hopefulness of recovery from suppuration of the hip-joint very poor. Several cases were related. In one, in an adult, there was disease of hip and knee together, and in another disease of hip and femur together. Both were in a state of extreme exhaustion, and both recovered well. In another case, in a boy, the operation was done in spite of advanced lardaceous disease and an enormous liver, with the result of greatly improved health and diminution of the liver. In a fourth case, in which extreme exhaustion from suppuration was the reason for amputation, erysipelas had attacked the limb on the day before the operation, yet a successful result ensued. The author stated that he had not in any single case lost a patient as the immediate result of the operation, nor was he aware that anyone had subsequently died. Respecting two, however, he was obliged to report that they had not regained good health nor had their sinuses healed when last seen. As regards the mode of operation, it had varied with the nature of the case. Of late he had used Furneaux Jordan's method, of which he thought highly. In one, done by that plan, with stripping up of periosteum, a long stump which appeared to contain bone was obtained. In all cases of late years some antiseptic method of dressing had been adopted, usually a strong lotion of lead and spirits of wine had been applied, but in some Lister's gauze dressings had been used. The paper concluded by the mention of cases in which, after consultation, the operation had been declined or deferred, on the plea that the patient would probably recover without it, and in which an opposite result had occurred.—Mr. Howard Marsh considered that the subject required a great deal more attention than had been given to it. In his experience amputation at the hip-joint was a very valuable step to take in certain desperate cases. The tendency to the performance of this operation had increased of late at the Hospital for Sick Children, and he himself had performed the operation six times, and had seen it performed many times besides; death very rarely occurred. He had used Davy's lever many times, and he had found it one of the best appliances that had been introduced into surgical practice. By its use the operation was rendered as nearly as possible bloodless, for it controlled not only the common femoral artery, but also the posterior division of the internal iliac artery. He had three times performed Furneaux Jordan's method, and said that it took a long time to do, and the size of the wound was increased. There was less risk of hæmorrhage from the posterior flap if Davy's lever were used, and with it the old flap method could be done much more quickly than Furneaux Jordan's operation. In the latter operation amputation lower down could be done, so as to obtain a longer stump for the adaptation of an artificial limb; this and the subperiosteal method were noteworthy points in the case shown by the late Mr. Shuter to the Society. In this case there was a central stem in the stump, which had the consistence of bone, though it was probably not composed of osseous tissue. The disappearance of the signs of amyloid disease after removal of the strumous disease was a most important and well-ascertained fact. Moreover, the presence of lardaceous disease need form no bar to the operation. Some years ago, when he was a member of the committee for investigation into the treatment of hip disease by different methods, it was ascertained that death occurred in 33 per cent. of the cases treated by any method, and so it was a well-ascertained fact that death could result from hip-joint disease.—Mr. Golding-Bird said that Furneaux Jordan's operation was very much like Fleuret's modification of Larrey's operation on the shoulder-joint. He advised that the circular incision should be made in two portions, the second circular incision to be performed after enucleation of the bone; the second circular division divides the vessels last. The vertical incision should be made first, as it enables the joint to be examined and the kind of operation to be decided upon.—Mr. R. Barwell shared almost the same opinions as those which Mr. Hutchinson had expressed. In a case in which the liver reached as low as the umbilicus there was albuminuria, with large hyaline casts, and amputation was performed for strumous disease of the hip-joint. He urged that frequent microscopical examinations of the urine should be made, for the presence of narrow casts with albuminuria contra-indicated the operation of amputation, as the small casts, he believed, indicated deeper affection of the kidneys. Statistics showed how very much more favourable were amputations done for chronic strumous disease as compared with those performed for tumour or injury. He testified to the great value of Davy's lever, though this agent had sometimes caused bruising of the iliac vein and its consequences. He agreed with Mr. Marsh that Furneaux Jordan's method, being more tedious, might be dispensed with now that Davy's lever could be used.—Mr. Black spoke of the elastic tourniquet, and said that it perfectly controlled the circulation through the lower limb. Out of forty cases of amputation at the hip-joint in which Mr. Davy had used the lever, there was but one case in which the intestine had been damaged or any injury had resulted.—Mr. Warrington Haward said there was no doubt that for strumous disease amputation was a different matter than for tumour or injury, and much more favourable. He spoke of the enlargement of organs, and said that he remembered a case in which this diminution occurred where there had been no surgical interference. He believed in the use of Davy's lever, and had employed it successfully in a for hof ruptured gluteal artery. He considered that it might in replyasily used for the right as the left limb. Mention was made of the use of a cone of wood suitably padded for compressing the abdominal aorta, which was less distressing than Lister's tourniquet. In reply to Mr. Hutchinson, he said the case in which spontaneous diminution of the liver took place there was chronic hip-joint disease, which also receded under medical treatment.—Mr. Bryant said that his experience was to the effect that amputation in such cases was unusually favourable, but he considered with Mr. Hutchinson that some surgeons were apt to postpone the operation unnecessarily. The value of the long stump was remarked upon. He would not dispense with the subperiosteal method, for it gave rise to less disturbance in the muscles about the part, and left a dense hard mass of new tissue, probably not bone, but fibrous in nature. He did not think it a matter of much importance whether the vertical or circular incision was made first. Davy's lever was not so successful as was at first believed, for, in addition to injury of the intestine, it had also caused bruising of the iliac veins. A means employed by Mr. Lloyd of Birmingham was favourably spoken of; a folded indiarubber bandage was passed round the buttock, between the anus and the ischial tuberosity, and then over the hip, so as to press on a roller placed along the line of the external iliac artery.—Dr. Marshall, in reply, said that one point had been overlooked in his paper, and that was that all his operations were done on children. He had used Esmarch's bandage, though it slipped in one case. Stress was laid on the importance of rectal alimentation during the period of vomiting and collapse. He said that Dr. Maclaren found, by experiment on the dead body, that the flap operation took but eleven seconds less to perform than Furneaux Jordan's operation. The operation he advocated was followed by less shock, and there was less chance of septic inoculation.—Mr. Hutchinson, in reply, said with regard to the use of Davy's lever, he shared the opinion which the President had expressed. He had found that an elastic strap placed round the abdomen, compressing a large towel placed over the aorta, was most effective in controlling hæmorrhage. The method of Furneaux Jordan gave a better stump, though the time required for the operation was rather longer.

Dr. Colcott Fox read a paper on a Peculiar Form of Skin Disease, with the object of drawing attention to an affection of the skin accurately described for the first time by Hovaud of Lyons, in the seventh volume of the first series of the *Annales de Derm. et de Syph.* Dr. Fox had met with seven cases in the last two or three years, and thought the disease was a distinct morbid entity resembling Willan's roseola annulata in appearance, but running a chronic course. The lesions were slightly raised, rounded, the smaller uniform in aspect, the others depressed in the centre with only the borders raised, which gave them a distinctly circinate form. Their colour varied from a pale-rose to yellowish-white, approaching to the tint of the surrounding skin, so that one could sometimes with difficulty distinguish them from the rest of the integument. Often the border alone was coloured. The eruption was constituted by discrete or confluent patches, of which the dimensions varied ordinarily from a lentil to a two-franc piece. They exceeded these dimensions only in rare cases. The maculæ were constantly dry, their surface was more or less furfuraceous. They were accompanied by a little itching, especially when they were excited and reddened by heat or bathing. The eruption seemed to commence nearly always on the trunk and extended thence to the limbs, and disappeared in the order of its invasion. Its etiology was very obscure. Hovaud's cases were met with between the ages of eight and thirteen, and Dr. Fox had seen the eruption at four years of age. He then detailed two cases of a somewhat similar condition in children, which he believed to be the pityriasis circiné et marginé of Vidal, only there was considerable symmetry. The eruption was almost universal, and the maculæ rather larger than in the affection portrayed by Hovaud. In these cases the patches were found to be invariably crowded with masses of micro-organisms. The hairs were unaffected, and there was no mycelium. Repeated attempts to inoculate the cultivated organisms had failed. He had already met with a similar organism in two cases of psoriasis in children, and it was possible that the micro-organism was commonly to be found amongst the desquamating epithelial scales of children's skins. A stained preparation was exhibited to the meeting.—Dr. Glover spoke of a case of the disease affecting the bare portion of the neck; the eruption was present in a young lady, aged twelve, and had the appearance of psoriasis guttata; it was slowly getting well.—

Dr. S. MACKENZIE said the microscopical appearances of the fungus were highly suggestive of a micrococus, as was also the fact that no mycelium had been discovered either by Vidal or Dr. Fox. Moreover, the micro-organism occurred in a variety of diseases. Further, in no case had there been any extension of the cutaneous disease to other individuals.—Mr. HUTCHINSON asked questions as to the cause of the malady and mode of cure. He was acquainted with a form of pityriasis which always commenced on the trunk and never affected the hands and feet, though it nearly always extended secondarily to the limbs. This eruption he believed to be due to the wearing of peculiar vests, and it might assume a great variety of forms; the eruption certainly spread to parts of the limbs where the vest or other offending article of clothing did not touch. If these patients wore silk next the skin, he found that the eruption disappeared.—Dr. Fox agreed with Dr. Mackenzine, and said that it was not he who had given the long name to the affection; of its cause he knew nothing.

Dr. Sidney Phillips showed a living specimen of Sporadic Cretinism, and Mr. Strugnell one of Total Paralysis of the Fifth Nerve.

MEDICAL SOCIETY OF LONDON.

Myxœdema.—Uncomplicated Brachial Monoplegia from Lesion of the Internal Capsule.

AN ordinary meeting of this Society was held on the 13th inst., Dr. W. Miller Ord, President, in the chair.

Dr. WHIPHAM read a paper on a case of Myxœdema, and showed microscopical specimens of some of the organs of the body. The patient was a female aged twenty. She had suffered from rickets, and the tibiæ were still bowed on her first admission to hospital. She had been languid and weak ever since the catamenia appeared. Up till two or three years ago she had had abundant very long golden hair, but this all fell out, and has grown but very slowly since. On admission she was ill-nourished and apathetic; red hair grew low on the forehead, and there was much downy hair on the temples. Her manner was slow. The abdominal swelling of which she complained had been coming on for three or four years. Slight œdema of the legs and occasional puffiness of the face were present. Polyuria had existed for several years. For the last three weeks the abdominal swelling had increased; there was anæmia, vomiting, and some swelling of the legs; the pulse was 8 per minute, very weak, and compressible; the feet and hands were large, the skin over them coarse, red, and cold; the urine was acid, albuminous, and had a specific gravity of 1016; the teeth were markedly notched. After some purgative treatment, the ascites was treated by Southey's tubes, and ten pints of fluid withdrawn. She then left the hospital, and was readmitted a year later, having lived in a state of complete idleness. She had had profuse menorrhagia. At the end of 1882 she manifested all the signs of myxœdema. She had previously been treated by the late Dr. Barclay as a case of chronic peritonitis. The thyroid body could not be felt. The ascites slowly and persistently increased; eight pints of viscid clear fluid were withdrawn; at one time diarrhœa was present. The temperature was rarely above normal. In August last she was sent into the hospital with pneumonia; the ascites was relieved by tapping; pericarditis supervened; and the patient died, the temperature having been between 102° and 103°. At the autopsy the body measured five feet two inches; the calves were very large; the left gastrocnemius weighed twenty-one ounces. There was a little lymph and fluid in the right pleural cavity. The upper lobe of the right lung was in a state of red hepatisation. In the submucosa of the stomach some patches of "mucous" tissue were seen. There were twenty pints of mahogany-coloured fluid in the peritoneum. In the brain behind the right locus niger there was a small deposit of hæmatoidin. Sections of the organs were made by Dr. Heneage Gibbes. In some parts of the brain there was an increase of the fibrous tissue in the perivascular spaces, and in places the vessels were enormously distended; in places the vascular walls were thickened. There was an increase of the fibrous tissues of the branches of the capsule of Glisson; the hepatic cells were compressed by intervening hyaline exudation. The signs of chronic interstitial nephritis were also present in patches, and in places the tubules were separated by hyaline material (œdema). The interstitial tissues of the pancreas were swollen and œdematous and bacteria were found. The ovaries were œdematous. The tongue had a general appearance of œdema and the muscle fibres showed a tendency to transverse cleavage. Œdema beneath the sarcolemma was detected in the muscle-fibres of the upper lip. In the pulp of the right middle finger the fibres were separated by œdema. Tubercular lesions were present in the lymphatic glands. The aorta showed thickenings and atheromatous changes. The case was compared with the description of the tissues given by Dr. Ord and Sir W. Gull.—Dr. ORD said that he now believed there were more changes in the connective tissue of the central nervous system than he had formerly admitted. He inquired whether any chemical investigation of the amount of mucin had been made.—Mr. VICTOR HORSLEY remarked on the presence of disease of the vessels in myxœdema. In cases of myxœdema symptoms of premature senility, with tremors and general weakness, were present. The thyroid gland in old age would be found to be greyish in colour; its weight was notably diminished. He thought that microscopical examinations of the thyroid in old age were much wanted.—Dr. HADDEN said that he had examined the thyroid gland in six or seven cases of myxœdema. Outside the acini there was a round-celled infiltration, which became organised into fibrous tissue; the cells of the acini underwent proliferation and became fibrous in structure. He had also found fibroid overgrowths in the portal canals. He was now investigating the condition of the thyroid gland in persons dying from any disease.—Dr. A. ROUTH asked whether the ovaries always presented the appearance Dr. Whipham had described, and made some remarks on the state of the catamenia.—Dr. WHIPHAM, in reply to the President, said no chemical examination had been made. He could give no further information concerning the ovaries and menstruation.

Dr. HUGHES BENNETT and Dr. M. C. CAMPBELL read a paper on a case of Brachial Monoplegia due to Lesion of the Internal Capsule. The patient was a man aged eighty, who, when in a condition of fair health, suddenly lost consciousness; on regaining his senses he was found to have lost his speech, and the left side of the face and the left upper extremity were paralysed. With the exception of the paralysis of the arm, he recovered from these symptoms. There was no rigidity of the affected muscles, and the sensibility was everywhere normal. This condition persisted for about six weeks, when the patient died from old age and general break-up of the constitution. The essential lesion found on post-mortem examination was a limited defined softening, about the size and shape of a small horsebean, but flatter, occupying the upper part of the internal capsule without seriously involving any of the neighbouring structures. It was stated that uncomplicated brachial monoplegia caused by a lesion of the internal capsule was of extremely rare occurrence, and from the circumstances likely always to be so. That such a lesion should have existed in the present instance suggested some interesting physiological and anatomical considerations. As all the conducting fibres from the different motor centres of the cortex are collected together at the internal capsule and pass through it in a very limited space, it is evident that if a small flat lesion causes paralysis of one limb only without affecting the others, the fibres from such motor centres must pass through the capsule in separate bundles. A diagram was shown and explained to attempt to define the course and position of these conducting fibres, as they run from the cortex cerebri through the corona radiata to the internal capsule. Dr. Bennett contended that both anatomical and pathological facts seemed to indicate that these conducting parts, which at first run from the cortex arranged in a lateral direction, as they entered the capsule bent upon themselves, passed through it in bundles, arranged in an antero-posterior fashion, those of the face being the most anterior; next in order coming those of the arm, leg, and trunk. In this case a limited disease destroyed only the fibres conducting motor impulses to the arm, leaving those of the face and leg on each side of them intact, thus supporting the above theory.—Dr. ORD spoke of the many-sided value of the case in question.—Mr. V. HORSLEY referred to a paper published by him in THE LANCET, vol. ii., p. 7, 1884, and said that the case bore out some views on "substitution" therein stated. The case also overthrew the theory of Munk, that the cortical centres were both sensory and motor, for the lesion merely removed the power of originating movement, and did not affect sensation in any way. The case also went against the view of Hughlings Jackson on bilateral representation of the limbs, for there was no recovery of power, even after some weeks had elapsed.—Dr. Kingston Fowler showed a patient suffering from nervous disease which began in the first instance as a case of left brachial monoplegia. He had no doubt then that there was a cerebral lesion of specific origin. Headache, diplopia, and partial blindness, with squint later on, were the early symptoms of the case. Some numbness along the course of the left ulnar nerve was present. After an attack, in which the patient was giddy and lost consciousness, the left arm was found to be paralysed; the left leg and face were also slightly affected. There was greatly delayed sensation on the left side, and the special senses were also affected on the same side. There was no optic neuritis. Under antisyphilitic treatment there was some recovery of power and return of sensation in the left limbs. At the early part of the present year an attack left him powerless in the right upper limb. There was also delayed sensation and delayed appearance of the reflex actions. A blow on any part of the body caused the head to be thrust forward. There were no knee-jerks.—Dr. H. Bennett briefly replied.

Reviews and Notices of Books.

The International Encyclopædia of Surgery. Edited by John Ashhurst, M.D. Vol. V. Pp. 1207. London: Macmillan. 1885.

This handsome volume contains articles by fourteen contributors, of whom seven are American physicians and surgeons of repute, five Englishmen, one Scotchman, and one Irishman. They are in order as follows. 1. Injuries of the Head, by Charles B. Nancrede, M.D., Professor of General Surgery in the Philadelphia Polyclinic. 2. Malformations and Diseases of the Head, by Frederic Treves, F.R.C.S., Lecturer on Anatomy, London Hospital. 3. Injuries and Diseases of the Eyes and their Appendages, by E. Williams, M.D., Professor of Ophthalmology in Miami Medical College, Cincinnati. 4. Injuries and Diseases of the Ear, by Albert H. Buck, M.D., of New York. 5. Diseases and Injuries of the Nose and its Accessory Sinuses, by George M. Lefferts, M.A., Clinical Professor of Laryngoscopy, Columbia College, New York. 6. Injuries and Diseases of the Face, Cheeks, and Lips, by Alfred C. Post, M.D., Emeritus Professor of Clinical Surgery in the University of the City of New York. 7. Injuries and Diseases of the Mouth, Fauces, Tongue, Palate, and Jaws, by Christopher Heath, F.R.C.S., Holme Professor of Clinical Surgery in University College, London. 8. Surgery of the Teeth and adjacent parts, by Norman W. Kingsley, M.D., Professor of Dental Art in New York College of Dentistry. The most original and perhaps the best article in the volume is the first, by Charles Nancrede. His experience and reading have been alike large, and the rules he gives are well worthy of consideration, though they are not always in accord with the text-books. Thus, in cases of simple depressed fractures he approves the use of the trephine and the elevation of the depressed portion; he thinks that the dangers of a simple depressed comminuted fracture are greater than those which follow its conversion into a compound fracture. Numerous and interesting cases of injuries to and of foreign bodies in the brain are given, and excellent rules are laid down for the determination of the fissure of Rolando and other points in cerebral topography. Dr. Williams's essay on Injuries and Diseases of the Eye occupies 120 pages, and is very complete. He commences with a short description of the anatomy of the orbit, eye, and its appendages, and then proceeds to consider the affections of the orbit; and some interesting cases are rather fully given. Wounds of the eyeball are then discussed, and good rules to determine whether a foreign body has penetrated or not are appended. He dwells very properly on the danger of wounds in the ciliary region, and records a case that young surgeons should bear in mind. A young lady, as a result of a perforating corneal ulcer, had a large prolapse of the iris, which, though disfiguring, was not apparently troublesome. Dr. Williams in an evil moment, clipped it off with scissors. Iritis followed of a persistent character, and after some time sympathetic ophthalmia of the opposite eye followed, leading to complete disorganisation and blindness. He may console himself with the reflection that the same untoward result has occurred in the practice of other ophthalmic surgeons besides himself. Dr. Williams thinks that an attack of sympathetic ophthalmia is preceded by a warning irritation in the sound eye, and that if this be recognised, and the offending eye be promptly removed before inflammation is established, the patient is saved from blindness. We are inclined to agree with him in the case of adults, but with children we think the rule should be general that in punctured wounds with knives, scissors, pins, or other similar instruments in the ciliary region the eye should be removed. It is almost impossible to keep a child quiet or to maintain a bandage upon both eyes, and irritation in them runs insidiously and rapidly into inflammation. The symptoms and treatment of purulent ophthalmia in children are of course well given, but the writer does not mention the prophylactic measures adopted with such success by Crédé, of using antiseptic vaginal injections just before delivery. The treatment of diseases of the cornea is treated at unusual length and with great ability. In regard to cataract, Dr. Williams operates without anæsthetic, and without dilatation of the pupil. He makes the section of the cornea at, or a little in front of, the sclero-corneal junction; he performs iridectomy; he carefully clears the pupil of fragments of the lens; he changes the dressings twice a day, and in ten days removes them altogether; he does not allow the use of glasses till six weeks have elapsed. The method and the details given are all unexceptionable, and may be followed implicitly by all who are about to operate. For the relief of glaucoma the writer practises iridectomy, but speaks doubtfully about sclerotomy. The chromolithographs, both of the diseases of the conjunctiva and iris, and of the ophthalmoscopic appearances of the eye in disease, are poor and unrepresentative. Mr. Bencke, the lithographer, could, we imagine, turn out something better than these. No satisfactory drawings of the fundus can be produced with only two or three tints.

The article by Dr. Buck on Injuries and Diseases of the Ear follows that on the Eye, and runs to about seventy pages. Dr. Buck considers Wilde's ear speculum, if made of silver, highly polished, and very thin, as the best means of exploring the meatus, when aided with a good forehead mirror, with a focal distance of twenty centimetres. He gives a very full description of the various maladies of the external ear, including eczema, diffuse inflammation, perichondritis, contusions, deformities, frost-bite and burns of the auricle, and impacted cerumen, common boils, ulcers, wounds, and new growths of the auditory meatus. In speaking of the modes of examining the middle ear, Dr. Buck gives Valsalva's and Politzer's methods and describes the mode of employment of the Eustachian catheter. He supplies some important and very useful directions with regard to the contra-indication for the use of Politzer's method, which, we fear, are often neglected. It should never be adopted, he says, until after both drum membranes have been examined, nor when there is a deeply depressed membrane, which may possibly be adherent to some of the deeper parts of the middle ear, nor when the drum membrane is atrophied or presents a thin cicatrix, nor when actually inflamed. When abscess of the tympanum exists, he has no hesitation in perforating the membrane, avoiding the dangerous region of the upper half of the posterior superior quadrant. The diseases of the mastoid rocess follow, with a very short section on affections of the uditory nerve. The article is illustrated by many woodcuts of instruments, some of which are novel, and an xcellent chromolithograph of the morbid appearances presented by the membrana tympani. Though brief, Dr. Buck has managed to compress into the space at his disposal nearly all that is important in his special subject, We may ay the same of Dr. Lefferts' essay on a subject not generally given in full in surgical works—namely, the Diseases nd Injuries of the Nose and its Accessory Sinuses, which, of course, involves a description of the examinations of hose parts known under the names of anterior rhinoscopy and pharyngo-rhinoscopy. The article on Injuries and Diseases of he Mouth has been entrusted to Mr. Christopher Heath, and s thoroughly and comprehensively treated, though Dr. Port till finds something to say on Injuries and Diseases of the ace, Cheek, and Lips, and Dr. Macleod on the Injuries nd Diseases of the Neck. Both Mr. Morris's article on njuries and Diseases of the Abdomen and Mr. Treves on Malformations and Diseases of the Head are very creditable productions. No better exponent of the modern views on the Varieties and Treatment of Hernia could have been ound than Mr. John Wood. The volume as a whole well ustains the repute of those which have preceded it, and it may be consulted with advantage by even the most accomplished surgeon.

Topographical Anatomy of the Brain. By J. C. DALTON, M.D., Professor Emeritus of Physiology in the College of Physicians and Surgeons, New York, and President of the College. Philadelphia: Lea Brothers and Co. 1885.

THIS is one of the most magnificent works on anatomy hat has appeared during the present generation, and will ot only supersede all its predecessors on the topographical anatomy of the brain, but make any further work on the ame lines unnecessary. It is published in three volumes, and contains forty-eight exquisite illustrations of the brain, *en masse* and in sections. The specimens were prepared by Dr. Dalton and photographed by Mr. G. Mason, photographer to the Bellevue Hospital, New York. Heliotype transfers were then made from the original negatives, and the plates printed by the Heliotype Printing Company of Boston. In this manner not only has perfect accuracy been secured, but one of the finest and most artistic works of recent times has been presented to the medical public. Its value as a work of reference is considerably increased by the very careful outline sketches which accompany the plates, and which enable them to be easily followed and understood. These sketches are very complete and accurate, and have been reproduced from tracings made by Dr. Richard Lennox of the Roosevelt Hospital, New York. The first volume is devoted to the exterior convolutions, and contains ten plates corresponding outline sketches, and the explanatory descriptions; in the second volume fifteen horizontal sections, and in the third volume twenty-three vertical sections, are similarly shown and explained. The descriptions by the author are clear, precise, and accurate; and the methods by which the sections were made and the specimens reproduced are given very plainly in an introductory chapter, which cannot fail to be of the greatest value to anyone who is desirous of making similar preparations. Criticism on such a work is superfluous. We can only congratulate Dr. Dalton, his assistants, and the publishers on the energy they have shown in undertaking such a work, and the success with which they have overcome a task presenting so many mechanical difficulties. We envy our American *confrères* the authorship and execution of so beautiful and useful an addition to medical literature, and much light is thrown on some obscure relations of parts of the brain which have never before been seen in correct juxtaposition.

ROYAL COLLEGE OF SURGEONS.

THE Committee on Charters and Bye-laws have adopted the following as their fifth report to the Council, viz.:—

The Committee have to report that, having considered the several proposals of the Association of Members of the College, they do not recommend that, as therein suggested, the whole Council be elected every three years; nor that the number of the Council be increased to twenty-five; nor that the Members, as well as the Fellows of the College, should take part in the election.

The Committee have further to report that, in pursuance of the resolution of the Council of the 8th of January last, the President invited delegates from the Association of Fellows to meet the Committee on the 3rd instant, that at the meeting held on that date ten delegates from the Association attended at the College, and that the proposals of the Association and the report thereon of the Committee, dated the 10th of December, 1884, were fully discussed, the delegates stating their reasons for their several recommendations.

From this discussion it appeared that the recommendations of the Association, to which the delegates attached the most importance, were those relating (1) to the constitution, mode of election, and duration of office of the Court of Examiners and Board of Examiners; (2) to the proposal that six instead of three Members of the Council should retire from office annually; (3) to the election of the President by the Fellows instead of by the Council; (4) to the right of meeting by the Fellows and Members without the sanction of the Council; and (5) to the time and mode of making public the minutes of the Council: all of which recommendations the delegates urged upon the Committee with a view to their adoption by the Council, renewing the request, "that no steps should be taken by the Council to obtain a new Charter until the various alterations proposed or accepted by the Council, together with the recommendations of the Association of Fellows, shall have been submitted to a general meeting of Fellows and Members."

The Committee, having fully considered the arguments brought before them by the delegates in favour of the recommendations of the Association of the Fellows, have to report to the Council that they adhere to the conclusions arrived at in their fourth report so far as they relate (1) to the constitution and duration of office of the Court of Examiners and the Board of Examiners; (2) to the duration of office of a Councillor; (3) to the election of President; and (4) to the right of meeting of the Fellows and Members, excepting that in page 8 of such report, in the paragraph respecting the meeting of Fellows and Members, they propose to substitute for the words "*provided that the objects of such meeting be approved by*" the words "*with the consent of*," the Council.

With respect (5) to the publication of the Minutes of the Council, the Committee recommend that, in lieu of the confirmed Minutes being suspended in the hall, as proposed in their fourth report, the Council should revert to the practice formerly in force, in accordance with the following resolution of the Council of the 10th of February, 1870, viz.:—"That the Minutes of each meeting of the Council be posted in the hall of the College within five days of each meeting; those Minutes having previously been submitted to the President or Senior or Junior Vice-President for approval."

The Committee have, in conclusion, to report to the Council that they do not recommend that there should be any delay in submitting to the proper authorities the proposed alterations in the Charter, inasmuch as the several alterations in the Charter proposed by the Council were submitted to a meeting of the Fellows and Members on the 24th of March, 1884, and acceded to at that meeting, and as the only two further alterations in the Charter, subsequently proposed, relating respectively to the qualification of a Fellow for election to the Council and to the mode of nomination of candidates for the Council, have been adopted by the Council in accordance with the proposals of the Association.

March 19th, 1885. T. SPENCER WELLS in the chair.

THE LANCET.

LONDON: SATURDAY, APRIL 18, 1885.

The lectures which Sir Andrew Clark has lately delivered before the Royal College of Physicians were, as was to be expected, couched in well-chosen language and full of closely-reasoned argument. Moreover, they contained clinical and pathological descriptions such as only a close and accurate observer could produce. That they will be widely studied is unquestionable, and the more so from the spice of polemics with which they are seasoned. For from one point of view they constitute a manifesto on the part of the lecturer against the prevailing tendency to regard the phthisical process as owning but one cause—viz., tubercular infection,—in that they bring into prominence the fact that the lung may undergo destruction by invasion of fibroid tissue originating in pleural inflammation. This is the underlying thesis of these Lumleian lectures, and although it may be thought to consist in little more than a restatement of a position which Sir Andrew long since took up, it receives new significance at the present day, when the true nature of the tubercular virus has apparently been revealed, and for the most part generally accepted. Sir Andrew Clark anticipated that his advocacy of such doctrine would meet with much adverse criticism from the modern pathologist; but we fear he is doomed to be disappointed. For even had his position been less powerfully supported by facts than it was, there does not seem *primâ facie* to be any room for objection to the conclusions at which he arrived. Time was when the term "phthisis" included not only tubercular affections, but gangrene, malignant growths, and other destructive lung disease; and the exclusion of such conditions was later followed by the further distinction into tubercular and pneumonic phthisis. It is now generally admitted that the latter classes have the same etiology as the former, the difference being mainly one of chronicity. There still remain such conditions as those to which the lectures were devoted, and if the term phthisis must be retained for them, then there is no reason at all why we should hesitate to admit a tubercular and a non-tubercular phthisis, or, if it be preferred, a bacillary and a non-bacillary form. The only limitation that can rightfully be placed upon such a view is that the alleged non-tubercular character of any given case shall be clearly proved, and that it be not confounded with those undoubted conditions where tubercle undergoes fibrotic change. It would be unsafe to assert that any one of the instances quoted by Sir Andrew falls under this last-named category, and therefore the question is narrowed to one of the comparative frequency of the two forms of chronic lung disease; that which commences in a simple "primitive" pleurisy, and that which begins with pulmonary tuberculosis, with secondary involvement of the pleura.

The manner in which Sir Andrew Clark developed his thesis was well chosen. He commenced by giving details of cases of dry pleurisy, of varying extent and intensity, leading up to cases which, after a number of years, succumbed, and proved to have most extensive pulmonary disorganisation, combined with equally extensive pleural changes. He then discussed at length the morbid anatomy of the process which has such destructive issues. It is somewhat difficult to follow him in the distinctions he lays down between the various forms of the pleural affection, based on a study of the nature of the exuded material. Indeed, one feels disposed to question the propriety of seeking to establish such distinctions; but, grounded as they are upon personal scrutiny, we would not venture to dispute their accuracy. That one form of exudation partakes of a fibrinous, another of a cellular (the term "croupous" is surely inapplicable) character, and that a third deserves to be called "proliferative" is perhaps justified, but the distinctions are often so blurred as to be wanting in those clear outlines which render them suitable for definition. Nor did the lecturer apparently allude to the cases which are obviously tubercular, where the portions of pleural membrane still free from adhesion exhibit undoubted granulations. To be sure, such a condition would have been foreign to his subject, but its recognition should have been allowed. The pulmonary parenchyma is liable to invasion by fibroid tissue spreading along the interlobular septa in the first place, causing thickening of the alveolar walls, peribronchial and perivascular tissue subsequently, and, in fine, so altering both the texture and nutrition of the lung that the organ becomes converted into a dense sclerotic mass, probably permeated by dilated bronchi, or else the seat of excavations, which may have proceeded from bronchiectasis, or been due to local necrosis of tissue from interference with the blood-supply, produced by the fibrotic invasion. The description of the manner in which this disorganisation proceeds, of the resemblance at certain stages to the appearances presented by fibroid tubercle, and of a differentiation of the issue into the fibroid lung, the bronchiectatic lung, and the fibroid phthisical lung, was given by the lecturer with ample detail, and the clinical recognition of such cases was exemplified in the third lecture.

The unilateral character of the affection, its extremely slow progress, the absence of pyrexia or emaciation, and the frequently entire lack of evidence of an inherited taint, coupled of course with the failure to detect bacilli in the sputa, are facts which strikingly differentiate such cases from ordinary tubercular phthisis. That, however, does not preclude the admission of the fact—a fact which comes so materially to dispel the gloom of the ordinary prognosis of phthisis—that tubercular disease may become quiescent, or may initiate fibrotic changes in which itself shares, and, by reason of them, progress with comparative slowness. The truly tubercular are, however, always prone to an outburst of the infection; for many such cases eventually terminate after an illness of a few weeks' duration, by no means sufficient to account for the extensive fibrotic lesions that occur in the lung. It would have been interesting to have learned whether the subjects of pleurogenic phthisis, or of the fibroid lung state resulting from simple pleurisy, ever become the victims of tubercular infection. In such a case the mingling of the characters of the two great factors in phthisis would add greatly to the difficulty of unravelling the truth. Sir ANDREW CLARK has done good service in so pointedly showing the dependence of this class of case upon antecedent pleurisy; and we think we may go so far as to accept with him the notion that such pleurisy is neither tubercular in itself nor the necessary precursor of pulmonary tubercle. At the same time, the precise discrimination of the two forms of chronic lung disease, and particularly the possibility of tubercular pleurisy eventuating in changes similar to those ascribed by Sir ANDREW to non-tubercular inflammation of the serous membrane, are subjects which may still afford material for further investigation.

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As may be inferred from the brief announcement which we made last week, and from the fifth report of the Committee on Charters and Bye-laws, republished in another column of this week's issue, the Council of the College of Surgeons of England has spoken what it would fain believe is the last word anent the alterations to be made in the Charters. The conclusion to which the Council has arrived is that it cordially approves the various alterations which itself initiated with a view of extending its own power, influence, and authority; and it has, after some pressure, expressed a willingness to revert to two Resolutions which it adopted over fifteen years ago—namely, first, to suspend a supervised copy of the Minutes in the hall of the College: and, second, to allow the holding of meetings of Fellows and Members in the College on requisition. It has yielded to the demand that an annual meeting of the Fellows and Members shall be held for the reception of the report of the Council, though it has given no undertaking that the report shall be *discussed;* and it has agreed to accept the proposal that the voting at the election of members of Council may be conducted in person or by voting paper. These, together with a suggestion made by the Association of Fellows, that any Fellow, who has been a Fellow for ten years or a Member for twenty years, shall be eligible for a seat in the Council, are all the material alterations that the Council purposes to introduce into the new Charter.

To those persons who have had actual experience of the inherent repugnance to alteration of any kind exhibited by the executive of all corporate bodies these changes may appear at once numerous and far-reaching. Nor can it be denied that some of them are real and fundamental and big with possibilities. Indeed, their only drawback is that they have come eighty-five years behind their due time; for it is a historical fact that there is scarcely a single important alteration (always excepting those that are strictly autochthonous in the Council), which was not repeatedly advocated by independent persons during the discussions and agitations which immediately preceded the original establishment of the College. But, considerable as the proposed alterations may be, they embrace only a part of the change which persons believe to be indispensable to the growing importance of the College and the professional and academic status of the Fellows and Members. Of this the report of the Committee on Charters and Bye-laws above mentioned contains unmistakable evidence. This report shows:—(1) The Board of Examiners is to remain unreformed; (2) the tenure of office of members of the Council will remain unabridged; (3) the Council will continue to elect the President of the College; and (4) the Members of the College shall have no part in the election of the members of the Council. The meaning of most of this must be sufficiently obvious. Examiners will continue eligible for seats in the Council, so that in the future, as in the past, one-half or more of the executive of the College may be persons who, as examiners, will absorb at least one-half of the ordinary revenue of the College. And as these examiners are elected by the Council, they may, to all intents and purposes, be self-elected; self-elected, that is, each to an emolument of between £400 and £500 per annum. And this happy privilege may be extended, as in the case of a late examiner, to a period of fourteen or fifteen years. A recommendation of the Association of Fellows was intended to render such an abuse of interest, power, and privilege impossible; but the Council, consisting largely of present and past Examiners, has a second time refused to accept it. Equally uncompromising is its rejection of the recommendation made by the Association of Fellows as well as by that of Members, that the tenure of office of members of Council shall be shortened from eight to three or four years. "With regard to any influence of the constituent over the conduct of the representative, there is little difference between a seat in Parliament for seven years and a seat for life," said JUNIUS; and, *mutatis mutandis*, the members of the Council of the Royal College of Surgeons of England are evidently of the same opinion.

Of the evils of leaving the election of President of the College in the hands of the Council it is unnecessary to say more than what has been advanced times without number. The custom of electing the senior member of the Council to the office of President may be a convenient and easy way of making things pleasant, but it is neither dignified nor discriminating. Through lack of courage the Council has more than once placed in the presidential chair a person notoriously unfit.

The Association of Fellows has cause to be dissatisfied with the reception that its recommendations have received. It is hardly likely that the Association will accept the decision of a bare majority of twenty-four Fellows as final. That the Association of *Members* is not disposed quietly to submit is sufficiently evident from the letter signed by its honorary secretaries which appears in another column. A public meeting is to be held in the Westminster Town Hall on May 4th, at 4 P.M., to discuss what further steps may be taken in order to obtain such reforms as are felt to be most urgently needed in the administrative department of the College. There may be, and doubtless are, difficulties in the way of carrying out the programme drawn up by the Association of Members; and the burden of showing how these difficulties may be overcome lies with the Association. But making full allowance for these and other considerations, it is impossible not to feel that the Council has treated the Association of Members somewhat cavalierly.

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IN a paper recently communicated to the Society of Medical Officers of Health, Mr. HENRY E. ARMSTRONG of Newcastle-upon-Tyne deals at length with the subject of the status of his fellow-officers throughout the country, a matter to which we also adverted in our issue of the 4th inst.; and Mr. ARMSTRONG's communication may be taken as a summary of complaints which are very generally felt at the present time. First and foremost, it must be admitted that the position which the medical officer of health holds as regards the tenure of his office is most unsatisfactory; indeed, it is difficult anywhere else in the public service to find its counterpart. Sanitary authorities appoint their town clerks, treasurers, engineers, and surveyors to an office which it is understood they hold during good behaviour; but when it comes to the medical officer of health the appointment is for a limited period, often of one year's duration, and very seldom exceeding five years, and the officer is by this reason alone seriously hampered in his work, for he knows that he will have periodically to seek re-election at the hands of those with whom he is most concerned in his official capacity. It may be said that the difference between the officers referred to and the medical officer of health is due to the circumstance that, in the case of the latter, part payment of his salary is made out of a Parliamentary grant; but, as we have more than once pointed out, the same applies to the Poor-law medical officer, and yet his appointment is not so limited as to necessitate a frequent resort to the tactics involved in securing re-election. That the interests of the public are seriously hindered on account of the anomalous position in which the health officer is placed is a matter of common notoriety, for there are other authorities besides the one referred to by Mr. ARMSTRONG, who seek an officer who will carry out their determination to "do nowt that cost owt, and owt that cost nowt." In short, many an officer whose conscientious performance of his duties has involved some substantial expenditure has had to make way for one or more successors, who have consented at nominal salaries to take his place directly the expiration of his term of office has enabled the authority to replace him. So also, taking the large towns of England, it appears that the several officers of sanitary authorities to whom we have already referred have a maximum salary varying from £1200 to £3000 per annum; whereas the average yearly salary of medical officers of health in the sixteen extra-metropolitan cities and boroughs, having populations of 100,000 and upwards, who give their whole time to their official duties, ranges only from £400 to £900, and this notwithstanding the fact that none of the other appointments involve more preparatory training or a higher legal and scientific qualification than that which properly attaches to the post of officer of health. In other words, it is evident that the position of the officer having charge of the public health compares, in almost every respect, unfavourably with that of other professional public officers.

By way of remedy, Mr. ARMSTRONG proposes that health appointments should be more equalised, small and sparsely populated districts being combined for this purpose; that the Local Government Board should exercise a greater control over appointments made with their sanction; that local authorities should be made to learn that they cannot with impunity ignore the sound advice of their health officers; that the authority of the officer of health should be extended, and especially that he should always have a direct control over inspectors of nuisances; that the recompense and prospects of the officer of health should be improved; and lastly, that his tenure of office should be placed on a more satisfactory footing. Some of the details embodied in Mr. ARMSTRONG'S suggestions may be open to criticism, but the conclusions he arrives at are sound; and it is certain that unless the position of officers of health is soon placed on a different footing, it will be found that really skilled medical practitioners will not care to devote their time and energies to a branch of the profession from which they run the risk of being ejected whenever they perform their duties fearlessly and properly, and in which the salaries offered rarely compensate for the difficulties they have to contend with, and never make up for the want of security as regards tenure of office.

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DURING the last quarter of a century the relations subsisting between families and their ordinary medical attendants have been growing less and less intimate. There was a time well within the remembrance of men still in active practice when no act of discourtesy to the family doctor would have been regarded as more marked than for any member of a household he attended to seek another opinion, or, as it is commonly called, "further advice," without first giving an intimation of the desire to the family attendant. The question as to who the consultant should be was decided by mutual agreement. It was not an uncommon rule for a family to settle on their consulting physician or surgeon once for all, and their relations became only second in intimacy to those held by the family doctor. A feeling of friendship and of mutual trust grew up very naturally between consultants and family practitioners under these circumstances, conducive alike to the welfare of patients and the comfort of their professional advisers. But all this is now changed. The members of a family feel themselves at liberty to consult whom they please, with or without the consent of their family attendant; nor are patients content with one opinion, but frequently seek one after another, obtaining what seems to the patient "a difference of opinion" in every instance, and often making a simple case appear a complication. Distrust of the judgment of the profession results. Instances occur of several opinions, each irrespective of the others, being obtained in this way. All this is much to be regretted, not as destructive to pleasant and useful professional relations alone, but in the interest of patients.

For the bringing about of these undesirable changes the consultant is chiefly responsible, though some of the blame must lie with the patient. There was a time when the consulting physician or surgeon would have regarded it as unbecoming his dignity to lend himself to any system which embodied discourtesy to a professional brother, and when he would have shrunk from aiding a course which in many instances enables a patient to seek his own injury under the delusion that he is finding the best means of relief. It is not uncommon for the consultant to be separated from the patient by long distances, which render frequent interviews impossible. A prescription is given, and general directions; but the patient as a rule depends on the former, which, if it gives relief, often travels the round of his friends supposed to be similarly affected, though a few hours after being written the prescription may cease to be well adapted to the case, and in some instances even hurtful. It is well worthy of the consideration of consultants and patients whether a system so mischievous should not be abandoned. That it should be discouraged by the profession there can be no doubt, and each member should consider how this discouragement can best be given. Patients are free to seek the opinion of any medical man, but medical men who are not the regular attendants of the family should hold themselves equally free not to give this opinion, except in conjunction with or through the regular attendant of the family.' Much heart-burning would be saved to doctors, and distress to patients, if this rule were more generally observed. It may not at all times be easy to refuse to advise when the patient has determined to seek what he regards as an unprejudiced opinion on his case. Under such circumstances the patient should be made to understand that an opinion thus given is not to be regarded as conclusive, but defective, in so far as it is not based on a knowledge of the family history, without which many a case must remain obscure. No diagnosis which ignores the family and personal history of the patient can be regarded as satisfactory, and this history as a rule can be best supplied by the family attendant; it is a factor in diagnosis which often enables a family practitioner to arrive at a right conclusion, when the highest talent and learning might be at fault.

The consulting surgeon or physician of the past is gradually merging into a specialist, and this fact has had something to do with these altered relations of practitioner, consultant, and patient. While specialism is a road to popularity and fortune, there is no prospect of its being abandoned; nor, while rightly used, is it desirable that it should be. But in proportion as a medical man's experience of a single disease and knowledge thereof increases, so his acquaintance with disease as a whole is liable to suffer diminution. Hence the greater need of the interposition of a family attendant between the patient and the specialist, for there are points for consideration besides those directly bearing on the cure of the localised disease, on which the specialist is too apt to concentrate all his attention, often to the disadvantage of the patient.

In country districts, where the advice of another general practitioner in the adjacent town is sought without the knowledge of the family attendant (if the fact oozes out, as is most likely), the relations between the two medical men are apt to become very strained, as well as those between the family practitioner and the family. If the town practitioner aspires to the position of consultant among his country brethren, he will need under such circumstances considerable tact. He will desire to avoid offence to a family, it may be of local distinction, whose good opinion he may wish to maintain. He may have to choose between offending a family whose friendliness is of importance to him, or a fellow practitioner. Yet his course is a plain one. He should endeavour by all means in his power to bring about a consultation between himself and his country neighbour, who has acted as the family attendant, in which attempt, if he is in earnest, he will seldom fail.

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ADVERTISEMENT of a certain kind and degree is as essential to professional work as to trade. The mere presence of a professional man in any neighbourhood where he is known as such is an actual guide to those who may require his services. The most modest literal indication of a practised calling, even on the hall-door of a practitioner, is advertisement, though of a severely classic dignity. So much is necessary for recognition. A mark of some sort belongs to every office. Every order of society has a descriptive term allotted to it. Indeed, a more austere abstemiousness in the use of titles would lead to great public inconvenience, particularly in the case of our own calling, in which emergencies are common, and the best physician for the time being is often the one who can first be found. Let us, however, cross the line of necessary convenience and begin to expatiate in the language of recommendation, of advertisement properly so called, and we enter at once upon doubtful ground. Leaving the terms of plain proposal, we begin to traffic with popular fancy, and we take up a position which, never noble, is most unworthy of those who apply a teaching which has any claim to general acceptation. The difference between self-advancement in an honourable and a dishonourable sense is, therefore, a difference of degree. It is not on that account the less real. But where does fault begin? A certain reputation, over and above the mere working badge, belongs to each one in proportion to his ability and attainments. Is this to be demurely shadowed, or is it to be publicly set forth? We may say, in answer to this question, that so much prestige as naturally grows out of personal effort, without any attempt on the part of the person most interested to force its growth, is justifiable. Thus the publication of researches among fellow investigators is a fair reward of labour. The spontaneous recommendation of benefited patients is likewise a legitimate advantage. To parade the merit of the discovery, or of the applied skill, before the public eye in order to promote a private gain would be to make that gain the chief professional ambition, and would not be justifiable.

We may profitably compare the conduct of gentlemen in legal practice with that of our medical brethren in this matter, and also consider some of the inducements which are apt to influence the views of one or the other class with regard to it. We are probably right in saying that the great majority of the members of both professions are equally opposed to advertisement in its ordinary and offensive sense. Probably also the legal profession as a whole is less open to reproach on this head than our own. There is less emergency and urgency in legal than in medical work; litigants are usually content to occupy some time in selecting a good lawyer. Minutes or hours do not often mean life or death in the business for which they seek him. This may account for the absence of any signs equivalent to the private dispensary, *open surgery*, or *the* familiar beacon light of medicine about the house of the practising solicitor. Medical emergencies do not, we think, require the use of all this pretension; but we can imagine that some practitioners have been misled by thinking that they do. Advertisement by means of a circulated card, or of a door-plate or slab of sensational size and covered with credential titles, hours of consultation, &c., is another objectionable method. This practice is not unusual among members of both professions at the start or even in the later progress of their independent career. We admit that it is, on the whole, exceptional, as is fortunately the still less excusable custom of systematic touting by means of agents—a custom, we believe, more common among the lower strata of legal practice than among those of the healing art. Heartily as we oppose these and all kindred methods of advertisement, we cannot but think that the temptation to resort to them is stronger in the case of our younger and poorer medical brethren than of the votaries of the law. We are comparatively straitened, for example, in the matter of remunerative appointments. The greater number of public offices with us are gratuitous. This cannot be said of lawyers. The fees of general practice, again, do not bear nearly the same ratio of emolument to the work done as do the charges of legal procedure. We are, moreover, expected in the name of common humanity to render many services as matter of charity even in our private medical capacity, and to some extent this is unavoidable. Resort to law courts to recover fees is, in the case of medical men, fraught with serious drawbacks, quite apart from the trouble and loss of time which they directly cause, while costs for the lawyer are part of the assignment of every verdict, and the assignment implies neither trouble nor loss of professional dignity. These various circumstances must greatly discount the value of medical work, and intensify the tendency to place considerations of pocket before those of duty and honour. We earnestly press upon all who are subject to such temptations as we have indicated, and first of all upon the younger members of our own body, to rely notwithstanding upon the regular methods of practice, even at the risk of early difficulties, since there is no other road so sure to final professional success and satisfaction.

Annotations.

"Ne quid nimis."

THE M.D. AND M.S. DEGREES OF THE LONDON UNIVERSITY.

At the last meeting of the Senate of the University of London it was resolved, on the recommendation of the Conjoint Committee on Examinations, that "the subjects of Logic and Psychology should be withdrawn from the syllabus of the M.D. and M.S. Examinations, and that in lieu thereof questions should be substituted in Mental Physiology, especially in its relation to Mental Disorder." This formal withdrawal of such an obsolete mental gymnastic as Formal Logic will be so far satisfactory to candidates for the M.D. and M.S. degrees; but the real difficulty has always been to understand what is included in the term "Psychology." It is quite certain that different examiners have given a special significance to the term. We wish very much that "Mental Physiology, especially in its relations to Mental Disorder," were more closely defined, as we foresee the former difficulty arising under the new regulation. The Physiology of the Brain is within the range of the syllabus of the Intermediate M.B.; the treatment of its diseases is included in the Final M.B. Examination. We could have wished that so-called Psychology, which rests on no scientific basis whatever, and is only inferential from beginning to end, had been simply withdrawn, and that no such palpable compromise as the present regulation had been put in its stead; for it must always remain to the candidate that fatal possibility—an unknown quantity.

PUBLIC HEALTH (MEMBERS AND OFFICERS) BILL.

Under Section 193 of the Public Health Act, 1875, it is enacted that officers or servants of local authorities shall not be in any way concerned or interested in any bargain or contract made by those authorities, and this under pain of penalty and at the risk of being held hereafter incapable of holding office. This clause is found to act in certain instances with unnecessary severity, and hence a Bill, which bears the names of Sir John Kennaway, Mr. Long, and Mr. Cowen, has been brought in for the purpose of enabling officers and servants to be interested in contracts with local authorities as to the sale, purchase, leasing, or hiring of lands, rooms, or offices, and also as regards the insertion of advertisements in newspapers in which they are interested, provided the consent of two-thirds of the number of members of the local authority present at a meeting held seven days after a notice stating the nature of the contract has been sent to every member of that authority has been obtained. Another clause makes it unnecessary for any member of an authority to vacate his seat by reason of his having a share or interest in any papers in which advertisements relating to the business of the authority have been inserted. So far as advertisements are concerned, the Bill is unquestionably needed; and as to the other matters referred to, the precautions which will be necessary seem ample to cover any possible irregularities.

METROPOLITAN LOCAL DEATH-RATES.

The disturbing influence of deaths in public institutions causes considerable difficulty in the calculation of trustworthy local death-rates in the metropolis. It is only a year or two since the insertion in the death register of the previous residence in entries relating to deaths in institutions first rendered possible the distribution of these deaths to the sanitary districts to which they belong. The last Weekly Return gives for the first time a table showing the corrected mortality in Registration London and in its thirty-nine sanitary areas. The period embraced by this return is the thirteen weeks ending the 4th inst. It is well known that in most large towns certain numbers of deaths of non-residents are recorded, but it has been held that these deaths are balanced by those of residents recorded outside. The new table given by the Registrar-General corroborates the trustworthiness of this assumption. The result of the correction of the recorded deaths in Registration London is to add 192 deaths of London residents recorded in the metropolitan asylum hospitals situated outside London, and to exclude 281 deaths of non-residents registered inside London. There can be very little doubt that if the deaths in the county lunatic asylums and in the metropolitan asylums for imbeciles at Leavesden, Caterham, and Darenth were also brought into account, the deaths of residents outside would fully balance those of non-residents inside. The corrected death-rate for the whole of London last quarter therefore differs but slightly from the uncorrected rate—it was 21·5 instead of 21·6 per 1000. This correction, however, leaves out of account the disturbing influence of an unknown number of deaths of domestic servants, shop assistants, and other town immigrants, who, when health fails, return to their country homes, where their deaths in many instances are recorded, although undoubtedly due to the effect of town residence. No attempt is made by the Registrar-General to calculate the death-rate in each of the thirty-nine sanitary areas within Registration London. This is probably due to difficulties in the way of satisfactorily estimating the present population of these areas. In the remarks on the table, however, the death-rates during last quarter in the five groups of registration districts are given as 19·4 in the West, 20·4 in the North, 20·8 in the South, 23·8 in the East, and 29·0 in the Central. These variations in the death-rates give useful indications of the principal slum localities of the metropolis. On the assumption that the increase of population since 1881 has been maintained at the same rate that prevailed between 1871 and 1881, it may be calculated that the death-rate in the first quarter of this year ranged from 27 to 31 per 1000 in St. Giles's, Holborn, St. Luke's, St. George's-in-the-East, Stepney, St. Saviour's (Southwark), and St. George's (Southwark). The death-rates from the principal zymotic diseases ranged from 1·52 per 1000 in the West, to 2·49 and 2·95 in the Central and East groups of districts. The rate from scarlet fever, which averaged 0·18 in London, was equal to 0·56 in East London, and was nearly six times as great as in the four other groups. It is also stated that 4 of the 7 deaths from typhus belonged to East London. These statistics call for the earnest consideration, not only of the metropolitan sanitary authorities, but also of all those interested in the health and social condition of the population of London.

"WIND AND WEATHER PERMITTING."

THIS condition, painfully familiar to the last generation of travellers by sea, but almost forgotten since the days of steam-power afloat, ought to be adopted as a general provision by all who are not of the very strongest and healthiest type of humanity, in respect to out-door engagements at this most trying season of the year, more particularly in London and other large cities. A glance at the obituary column in any leading newspaper will suffice to prove that the risks of life, especially to the weakly and the aged, just now are out of all proportion to the apparent natural vicissitudes of the Spring. The truth is, that the changes of *personal* temperature are so sudden and severe that few constitutions can suffer them with impunity. What we mean by personal temperature is this: The atmosphere generally may, as shown by the thermometer, be fairly mild, or at least not remarkably cold, but owing to the strong currents of icy wind which rush through doors and under archways, out of courts and alleys, round corners and across main thoroughfares from side streets, a pedestrian not able to bear being almost instantaneously deprived of a large proportion of his caloric, and endowed with such vigorous powers of heat-production as to be able to compensate for the loss with extraordinary rapidity, must in a walk of very short duration be thoroughly chilled. Take, for example, any ordinary main street in London of some quarter or third of a mile in length. It will probably have fifteen or twenty side streets on each side; so that, unless the wind chance to blow parallel with the main thoroughfare, a person walking through it will encounter, say in twenty minutes, fifteen or twenty blasts of cold air, which will catch him suddenly. Each of these blasts will do two things to him. First, it will rapidly take from his body as much heat as can be abstracted in the period occupied in crossing the side street, which is considerable; and, secondly, it will give an appreciable depressing shock to the nerve centres through the nerves of the skin. These fifteen or twenty successive abstractions of heat and nervous depressions, following each other at intervals of a minute or a little over, will produce an aggregate impression on the vital state—that is, the heat and the energy of the organism together—at the end of the twenty minutes, which cannot fail to be felt by a weakly or susceptible person. There is no time to recover between the attacks. When a man takes his bath in the morning he gets a reaction following the depression of the chill; but if he no sooner got out of one bath than he plunged into another, instead of benefiting his health, the "tubbing" would do him harm. It is far worse for the pedestrian to walk along such a main thoroughfare as we have supposed than it would be for him to walk on a cliff exposed to the steady blow of the same wind. The organism can much more readily accommodate itself to a prolonged low temperature, if it be not a crippling cold, than it can sustain without injury a rapid succession of little chills and shocks. These are like the rain of knock-down blows that exhausts the boxer. He has no time "to get breath" between the attacks of his opponent. We have not exaggerated this matter, and we venture to think it is one which the dwellers in cities, and particularly those who pass the earlier weeks of the season in London, will do wisely to bear in mind. It is often difficult to tell how a "cold" has been "caught"; but this we know too well, that what seem to be very slight colds are often productive of the most serious results. It is not heroic, but rash, to risk taking cold. The most robust and apparently the strongest may succumb to the consequences of such an attack. Healthy and hardy country folk, and even mountaineers who "live in the open," frequently take cold in London or some large city. It is the fusilade of deadly little chills they cannot bear. No one need feel humiliated in taking precaution against the strangely harassing attack which the enemy is wont to make on our vital forces in Spring, and particularly in April and May.

TOLERANCE AND ADVANTAGE OF LARGE DOSES OF POTASSIUM IODIDE.

DR. HUTCHINSON of Chicago, in the New York *Medical Record*, details a case in which he had given large doses of iodide of potassium with a curative effect. The case was one of a woman, aged fifty-four, married for the second time, with three children by the first husband and one by the second, all healthy, and with no history of syphilis. The disease from which she had suffered for twelve years was abscesses on the legs, over the tibia, and on the chest, over the sternum. They were slow and very painful in their course, being months in opening, while months elapsed before the sinuses closed. They left numerous and depressed scars. At the time of consulting Dr. Hutchinson the patient had two ulcers on the forehead, and one *cold* abscess on the arm. Tonics having failed, and there being great pain on pressure over the shins, the patient was put on iodide of potassium, eight grains three times a day, till she took thirty grains three times a day. An average quantity of one drachm a day was taken for four months, with the effect of a cure. Tonics were afterwards given. There is a suspicious suggestion of a specific factor in this case, both in its symptoms and its therapeutics. The iodide was not only well borne, but the patient's appetite improved, and she rapidly regained flesh and strength, as often happens to patients in whom mercury acts curatively.

THE CONVICT BRIGGS.

WE are glad to find that after mature consideration the Home Secretary has advised Her Majesty to remit the remaining portion of the sentence of twenty years passed on the prisoner Briggs. This is only justice; for, as we pointed out in November, 1884, the medical evidence, as reported, was not consistent with the teachings of scientific knowledge; and, apart from this, it has transpired that the prisoner was in all probability physically incapable of *forcibly withholding* food from the deceased. We do not advocate the wholesale remission of punishment; no one will be found more loyal in the support of justice equitably dispensed than ourselves; but the above was evidently an instance for the exercise of the clemency of the Crown. It is to be hoped that Sir W. Harcourt will see his way to investigate, and that early, the case of Dr. Bradley, for if ever a prisoner merited the benefit of the doubt it was the latter.

THE LATE LORD MAYOR.

We learn that the late Lord Mayor had suffered for some years from diabetes. On Easter Monday he caught cold whilst supporting the Mayor of Brighton in his official capacity at the review on Brighton Downs. An attack of pleurisy supervened, but the fatal termination was caused by diabetic coma. Although so well recognised by the profession, it is hardly known beyond it on how fragile a thread a man's life depends when he is suffering from diabetes, even though the disease is not apparently progressive. The amount of sugar excreted may be stationary or even diminishing under medical and dietetic treatment, and yet by the slightest accident the balance may be destroyed and death rapidly result. A few weeks ago a bicycle accident of no very great severity caused the death of a diabetic patient; and here an attack of pleurisy, apparently also of an ordinary character, has determined the death of the Lord Mayor, not from the inflammation, but from diabetic coma. Cases in which the onset of blood-poisoning from a scratch on the hand, and infection by the acute exanthemata, have led to the death of diabetics almost before the diseases have had time to declare themselves are also not uncommon, and show what excessive care is necessary for the preservation of life against accident when a person is suffering from permanent glycosuria.

MICRO-ORGANISMS OF RHINO-SCLEROMA.

The existence of micro-organisms in rhino-scleroma has been denied by Fritsch, Pellizari, Chiari, and others. M. Cornil has examined with M. Alvarez a certain number of specimens of the disease in question, and they have not once failed to find bacteria having a peculiar form, and presenting a well-defined capsule. The bacilli are short rods, having a length of from about two to three thousandths of a millimetre, and about ·4 to ·5 μ in diameter. Spore-like bodies have been seen in the interior of the little rods. The micro-organisms may appear in the form of regular ovoids, of which the periphery is formed by a well-defined capsule. In the centre of this capsule the little rod is seen either as a homogeneous and smooth structure or else formed by two, three, or four round or ovoid granules. A clear line always exists around the bacillus. The capsule is formed of a hard structureless colloid material. The bacteria may unite in pairs by fusion of their capsules. Many of the bacilli were observed to be free in the tissues, being situate between the fibrils of the reticulum, around the large cells, in the spaces of the reticulum, or in the lymphatic vessels of the superficial or deep parts of the skin.

THE WESTMINSTER UNION.

The guardians of the Westminster Union who supported Mr. Bliss, the ex-master of the workhouse, in those irregularities which eventually deprived him of his appointment, undeterred by their rejection last year *en bloc*, again attempted at the last election to regain office. They were, however, rejected by an overwhelming majority of the ratepayers, whose public spirit, in polling so heavily as they did to prevent the return of the old members who on the last occasion of their holding office failed in so marked a degree to justify the trust reposed in them, cannot be too highly commended. At the last meeting of the Board of Guardians previous to the election, the following resolution was passed:—"That the best thanks of the Board be and are hereby accorded to Dr. Joseph Rogers, the medical officer of the workhouse, for the zeal and ability with which he has discharged the duties of his office during the past year, and for the confidence which the guardians have therefore been able to repose in him, and which they trust he will continue to deserve from their successors."

RESECTION OF CLAVICLE FOR SARCOMA.

An interesting surgical case has been placed on record by M. Polaillon. The patient was a girl aged sixteen, in whom a swelling of the outer end of the right clavicle was first noticed eighteen months ago, and had gradually increased in size. There was not much interference with the movements of the arm, and but little pain. The tumour was about the size of the fist, of bony consistence, and lobulated in outline. The skin over it was normal. There were no signs of compression of the brachial nerves or vessels. The lymphatic glands were healthy. Careful examination showed that the tumour did not pass beyond the limits of the expanded clavicle in any direction. The operation was performed on Jan. 29th under the spray. A horseshoe-shaped incision was made through the soft tissues, and the flap turned inwards, its base being at the neck of the patient; the clavicle was cut through at the insertion of the sterno-mastoid in the inner third of the bone, and then disarticulated at its outer extremity. In order to isolate the tumour the fibres of the trapezius and deltoid were cut through at their insertion into the clavicle. Antiseptic dressings were applied. The patient did well, and left the hospital six weeks after the operation. There was but little deformity, and the movements of the arm were perfectly preserved.

POOR-LAW MEDICAL RELIEF IN BIRMINGHAM.

An inquest in the Birmingham coroner's court on the 9th inst. resulted in a verdict of "Death from natural causes," with a rider affirming that the medical officer's conduct was very censurable. The facts lay in a small compass, and were substantially agreed upon. A poor man, aged forty-three, had suffered from bronchitis for three weeks, when, on March 28th, his son, aged fourteen, went to the parish offices and obtained an order from the relieving officer. The surgeon saw the patient the same evening, and several times afterwards, giving orders for medicine, which was duly supplied. But the poor man's circumstances were most wretched. His children having, according to report, deserted him, there was no one to attend to him; there was only a handful of fire in the grate, and some bags of flour did duty for a bed. In this state of things the medical officer strongly, and repeatedly, advised the patient's removal to the parish infirmary; but the advice was unheeded, until Saturday morning, the 4th inst., when deceased's brother called at the medical consulting-room in the parish offices, and obtained an order for removal from the surgeon, who signed it, though it appears he had not seen the patient for two days. The removal was effected with a plentiful supply of blankets, in a car-ambulance, and no one questioned that, on the patient's arrival at the infirmary, every possible attention was paid to him; but he did not survive many hours. The particular case derives special importance, from the exceptional circumstances in which Poor-law medical relief has for some time been administered in Birmingham. The infirmary at the workhouse is, by common consent, well regulated. The staff of resident doctors and nurses is good; cases of exceptional gravity are placed under the care of Dr. C. W. Suckling, one of the honorary physicians to the Queen's Hospital, and his recommendations are very liberally acted upon by the guardians. But the out-door medical relief has for many months been in an unsatisfactory state. An inquiry by the Local Government Board, during the summer of 1884, resulted in the resignation of the four medical officers, who had for several years ministered to the poor in the extensive parish of Birmingham. Projects of reform became the order of the day; but, pending their discussion, temporary medical officers were appointed, subject to a month's notice. Several at least of these gentlemen have done their work in an unimpeachable manner; but the conditions of the permanent appointments are yet undetermined. The delay in effecting the reforms, which everyone admits are urgently called for, is supposed to be due to some differences on administrative details between the Poor-law authorities in London and Birmingham. This is a state of things demanding immediate attention. The present Board of guardians in Birmingham may plead indulgence, as they have only been just appointed. But though that be true collectively, they are individually, for the most part, old guardians. Their chairman has a very large acquaintance with Poor-law medical relief, and the Inspector for the district is one of the ablest and most humane officials in the service. The case seems one for nverting Talleyrand's famous maxim—"Above all, some zeal, gentlemen," and the work may be done soon and well. The cause we plead is no other than that of thousands of sick and helpless poor.

PTOMAINES IN CHOLERA.

AN original article contributed to the *Journal de Pharmacie et de Chimie*, by M. Villiers, gives an account of some investigations on the presence of alkaloids in the tissues of fatal cases of cholera. The tissues studied were the kidneys, intestines, liver, and the blood in the heart. The method of extracting the alkaloid was that of Stas. The alkaloid was obtained in fair quantity from the intestines, some traces were separated from the kidneys, but the liver and blood contained almost none. The alkaloid is liquid, possesses an acrid taste and has the odour of fresh hawthorn. It had the alkaline reaction, and its base could not be displaced by the alkaline bicarbonates. Iodide of mercury and potash causes a white precipitate in its solutions or those of its alts. Iodised iodide of potassium gives a brown precipitate even in very dilute solutions. Bromine water, picric acid, chloride of gold, tannin, and bichloride of mercury give precipitates, but chloride of platinum and bichromate of potassium do not. Pure sulphuric acid develops a slight and fugacious violet colouration. The hydrochlorate of the alkaloid is neutral in reaction, crystallises in long fine needles, and is extremely deliquescent. The physiological effects in frogs were ill defined; in guinea-pigs very marked, and consisted of remarkable periodic variations in the frequency of the cardiac pulsations; the anterior limbs were remarkably convulsed three-quarters of an hour after the njection, and afterwards the posterior limbs were affected n a similar manner; the convulsions passed away, and the animal remained ill and died in four days. After death here were found subpleural ecchymoses; the heart was dilated and full of liquid blood; the brain was a little congested. M. Villiers believes that the alkaloid is formed in the intestines and excreted by the kidneys.

THE CHELTENHAM APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

WE have received several communications relating to the recent proceedings for the appointment of medical officer of health for the Borough of Cheltenham; and one which has just reached us from a disappointed candidate, and which is supplemented by accounts of the proceedings of the Town Council, places the whole matter before us. The election was to be made subject to the Order of the Local Government Board, which body requires that, unless it shall specially so decide, the candidate chosen shall be a fully qualified medical practitioner. The Cheltenham appointment had been held by a distinguished physician, and some thirty-five candidates sought to occupy the position which had been so ably filled by the late Dr. Wright, F.R.S. The candidates included practitioners of high and recognised standing, and men of scientific training, some of whom possessed certificates in hygiene: but amongst them was one who had a single qualification only, and he, though apparently a resident in Cheltenham, is stated not even to have been known to some of the medical profession of the town. This one candidate, therefore, failed to comply with the terms on which the advertisement declared that the appointment was to be made. But instead of his name being at once erased on the ground that he was disqualified, the corporation literally passed by all the qualified candidates and elected the only disqualified one amongst them. Then came the question as to the legality of his election on the ground of his possessing a single qualification only; but before this could be dealt with the candidate in question goes somewhere or other, and comes back within a few days fully fledged in so far as qualification is concerned. Now, the corporation submit that the man of their choice fully complies with the terms of the Order of the Local Government Board, and, according to an answer given by the Parliamentary Secretary of the Local Government Board in the House of Commons, this view is likely to be accepted by the Board. But another question is now being raised in the Town Council itself. Even if the Local Government Board choose to accept a qualification obtained after the election, and one the value of which can best be judged of by the circumstances under which it is procured, yet it is by no means clear that an election made subject to an advertisement which called for a duly qualified practitioner can be valid when the choice of the electing body falls upon a candidate who is not duly qualified, and this in the presence of a number of duly qualified candidates who had presented themselves for election. Mr. Onley, a member of the Town Council, has raised this point, and some at least of the rejected candidates intend to do the same. The question is one of extreme importance, for the Cheltenham election will form a precedent which is not likely to be forgotten, and we should like in the first instance to see it brought under the notice of the President of the Board, with a view of eliciting his official opinion on the subject. When that has been procured, the thirty-four duly qualified candidates who were passed by will know precisely how they stand with regard to future action.

HEREDITY AND TUMOURS OF THE EYE.

IN the *Revista Argentina de Ciencias Médicas*, a Buenos Ayres periodical, the typography and general "get up" of which we feel bound to say puts to shame most of the European medical monthlies, Dr. Juan Alba Carreras describes a case of cellular sarcoma of the choroid in a girl aged three years. An enormous eye protruded from the orbit, hard as an ivory ball, the pupil reaching to the edge of the cornea. The ocular conjunctiva was covered with numerous tortuous vessels, indicating great obstruction to circulation. The lens was quite opaque, and of a yellowish colour. There were severe shooting pains on the side of the head. After enucleation, a sarcoma of the choroid was found, of the size of a walnut, which had ruptured the sclerotic near the optic nerve, the sheath of which was two centimetres in thickness, and, instead of nervous tissue, contained only a white granular substance. The patient, though treated with antiseptic precautions, died of meningitis on the seventh day. As the question of the influence of heredity on ocular tumours had been raised, the relatives were examined. The father had a double external strabismus, caused by a coloboma of triangular shape, situated on the inferior and external aspect of each eye. In the brother, aged seven, was found in the left eye a dilated insensitive pupil and a detached retina, with complete loss of vision; the right eye being normal.

with the exception of some increase of tension. This child had received a blow in the left orbital region two months before, and for the last fortnight the parents had noticed that the fundus appeared white. The diagnosis was that a similar tumour existed to that from which the sister had suffered, and immediate enucleation was advised, which was refused, as, indeed, it had been when the other child was first seen. The conclusions drawn from this case are: 1. That predisposition to ocular tumours may be inherited, though in this instance the father's eyes have, up to the present time, shown no signs of malignant growth. 2. That coloboma in parents may serve to assist the diagnosis of a tumour in the fundus. 3. That there are conditions which serve to distinguish these tumours. 4. That it is necessary to insist on enucleation as soon as the existence of a tumour is recognised. If this had been permitted in this case, the extensive propagation along the optic nerve, which here existed, and which was doubtless the cause of death, would not have taken place.

VETERINARIANS AND FOOD INSPECTION.

THE veterinary surgeons of the province of Cordova having complained to the Spanish Royal Council of Health that the local authorities had appointed as inspectors of food two medical men, instead of members of their own body, whom they considered best fitted for such duties, the Royal Council replied that there was no doubt that veterinarians ought to be appointed to inspect meat, but that there was no law, and not even a uniformity of custom, concerning the appointment of inspectors of other articles of food. It was, however, a subject which ought to be settled, and therefore the Council resolved to advise the Government to make the following regulations:—(1) That the inspection of warm-blooded animals, alive or dead, fresh or preserved, should be exclusively in the hands of veterinarians; (2) that the inspection of all other articles of food sold in markets, including cold-blooded animals, should be committed indiscriminately to medical men or to pharmacists; (3) that both classes of inspectors be irremovable from their posts, except for grave cause. The Royal assent was given to the above-mentioned recommendations, which have just appeared in the *Official Gazette.*

AN ORTHOPÆDIC MARCH PAST.

GREATER triumphs than the artificial legs and arms invented by the Count de Beaufort civilisation has few to boast of. These limbs, at once thoroughly efficient and comparatively inexpensive, have been judiciously doled out by the "Assistance aux Mutilés pauvres," of which the Count is secretary, till not in Paris only, but throughout France, the soldier who in war, or the artisan who in work, has lost either extremity or both might now be mustered in their thousands to attest the blessings vouchsafed them by the rehabilitating invention. From France the charity has been extended to Italy, thanks to General H. H. Maxwell, C.B., R.A., who, wintering in Rome or *en route* through the Italian provinces, has now these six years been conferring the Beaufort limb on "deserving objects" with signal success. His experience, embodied in six reports addressed to those subscribing to the charity, has fairly and fully established the following:—1st, that the Beaufort leg, with its curved, solid, false foot, with which a man can walk like a carter for sixteen miles a day, is vastly more useful than any mere "peg-leg"; and, 2nd, that in many cases a Beaufort hand, with the fingers stiff and a spring thumb, is more serviceable than a mere hook, enabling its possessor to perform good penmanship, to pick up anything seizable, to hold knife and fork, to play chess, and, indeed, to do all the work of many a natural hand. Like all charities, that of the "Legs and Arms" must, however, be administered with circumspection. To quote the General (whose reports, by-the-way, always racy in style, are often romantic in interest):—"Giving a penny to a beggar, a shilling to a poor-box, or a cheque to a society are forms of charity which everyone more or less practises. Strong doubts, however, are apt to assail you at times as to whether you have done your alms in the most judicious way. You may have done right, and, with equal uncertainty, you may have done wrong. This state of mind paralyses your will to pull out your purse. But if you find a man with a wooden pin-leg sitting down breaking stones by the roadside; if the railway navvy or station porter has had his foot amputated, and you find him in hospital thinking of how he is to earn bread for himself and perhaps his wife and children; if, again, alongside of him there is a workman who has lost his hand, crushed by machinery or shattered by explosion,—in all such cases there is no reason for hesitation. You *must* be right in taking out pencil and paper and making notes of the case if you have time to spare; if not, in giving the sufferer your card. If you have not the necessary money yourself, it is to be had for the asking of others who are more fortunate." The General's practice has been to get the man into his own house after he has been completely cured and his stump and limbs have recovered their normal size, to measure him according to Count Beaufort's directions, which he reprints at the end of his first report, and to send these measurements to M. Werber of Paris (orthopædist to the "Assistance aux Mutilés pauvres"), who will promptly and for a very small sum confer on the amputated sufferer the means of earning his bread. What M. Werber has done so well is now equally performed by our own "Provident Surgical Appliance Society for the Relief of the Crippled Poor," which also takes orders for the Beaufort limb; while other great centres of population, not less than Paris, Rome, and London, will ere long be equipped with similarly appointed charities. In a country like Italy, where mendicancy has become an "institution," if not indeed one of the fine arts, General Maxwell's movement bids fair to fructify most beneficially; and in the files of rehabilitated and breadwinning cripples mobilised in his successive reports we congratulate him on a peculiarly efficient, not to say touching, "march past."

IRREGULAR PRACTICE IN CAPE COLONY.

THE great problem of ignorant and illegal practice is greater in remote and ill-provided districts than in settled countries and large towns. There are parts of Norway where people live thirty miles from the nearest surgeon. It must be still worse in many other countries, where educated advice and proper medicines are a luxury of the rich, and the great epochs of sickness and labour, and, even the great event of death, have to be faced without the assistance or the amenities of medicine. Worse than the mere absence of medical ministration occurs in such countries. The quack and the pretender take the place of, and assume more than the airs of, the regular practitioner, and often gravely add to the danger of the disease. A case in point is before us. At the Uitenhage Circuit Court (Cape Colony), Adolph Frankenburg has been tried for culpable homicide, or for contravention of the medical ordinance. The facts are that he, having no legal authorisation to practise, administered medicines to Joseph Blommetje of Vervolf, a strong, hearty man, suffering from erysipelas, and that he introduced into the eye certain highly irritating drops, after which the "apple of the eye dropped out," and the patient languished and died. Dr. Arthur Vanes was of opinion that the patient's death was caused by the treatment. The prisoner had been previously convicted. The judge, finding him guilty on the second count, inflicted a fine of £50, and was especially severe on the accused for venturing to treat so delicate an organ as the eye. Like other irregular practitioners, he took large fees from his dupes, to whom of course he promised a cure. The hardship is that at the Cape, as elsewhere, the chief odium of exposing the mischief worked by such characters as Frankenburg devolves on the medical practitioner who is called to see the victims. No good will be done till the law devolves on some public officer the duty of punishing illegal and ignorant practice.

MERCURIC CHLORIDE AS A DISINFECTANT.

DR. GEORGE M. STERNBERG, in his recent reports to the American Public Health Association, confirms the opinion arrived at of late years in more than one quarter as to the very powerful antiseptic action of perchloride of mercury. He relates experiments in proof of the inhibiting action of very dilute solutions upon the development of the bacilli of anthrax and other micro-organisms, and sums up his conclusions thus:—

"Mercuric chloride, in aqueous solution, in the proportion of 1 in 10,000, is a reliable agent for the destruction of micrococci and bacilli in active growth not containing spores; and in the proportion of 1 in 1000 it destroys the spores of bacilli, provided that the micro-organisms to be destroyed are fairly exposed to its action for a sufficient length of time. A standard solution of 1 in 1000 may be safely recommended for the disinfection of bedding and clothing which can be washed, for washing the floors and walls of infected apartments, for disinfecting the hands and instruments of surgeons and gynæcologists, and as a disinfecting wash for superficial wounds or mucous surfaces. For continuous application to wounds, &c., a solution of 1 in 10,000, or less, should be effective. A standard solution of 1 in 500, with the same quantity of potassium permanganate, may be safely recommended for the disinfection of liquid fæcal discharges, and other fluid material supposed to contain 'disease germs,' provided the time of exposure is not less than two hours, and the quantity of material to be disinfected is not in excess of that of the standard solution used."

WEST INDIAN FEVERS.

DR. A. W. REYES of Havana has published a pamphlet giving an account of the graver West Indian fevers, in which he says that owing to unusually severe meteorological conditions—intense heat followed by rain—fatal malarial fevers were very numerous last year. He advises medical men, when rain comes after great heat, to prepare for a treacherous and destructive enemy, and in general to treat all fevers with quinine; and he recommends mothers of families to be on the look-out for the first signs of fever and to call for medical aid immediately, suggesting that if they will "provide themselves with thermometers (for the detection of incipient fever), they will save many professional honoraria—and some tears."

PNEUMONIA IN NEW YORK.

A SUMMARY of 252 cases of lobar pneumonia is given in the form of a paper in the *Medical Record* for March 28th, by Dr. Edwin T. Doubleday, registrar of the New York Hospital, which was opened in 1877. In the earlier years the histories were not complete. The decades in which the largest number of cases occurred were from the ages of twenty to thirty, 70 males and 18 females; thirty to forty, 47 males and 13 females. In 150 cases there was no assignable exciting cause; in 47 cases there was exposure to wet and cold. There was an acknowledged alcoholic history in almost 50 per cent. of the cases, and where the history was marked the death-rate was 68 per cent. The complication most frequently noticed was pleurisy. The mortality was great. In the complicated cases, 85 died and 49 recovered; in uncomplicated, 33 died and 81 recovered. This high mortality is attributed by the author to the large number of complicated cases; the large number of those past treatment and moribund on admission to hospital; the patients being alcoholics as a rule; and the late day of admission, the fifth day of the disease. The remedies used were aconite (in a few cases) and quinine (extensively); when the case was seen before consolidation a dose of calomel (five to ten grains) was frequently given. For delirium, a very sparing use was made of bromides, chloral, and morphia. For heart failure, ammonia and tincture of digitalis (five to twenty minims) every three hours, with alcohol, were employed. Alcohol, in the form of whisky, was given early. Lately antipyrin had been given in 12 cases with the effect of reducing the temperature from 1° to 3°, and causing slight sweating and slight cardiac depression. The individual remedies, excepting perhaps the calomel, are not open to much criticism; but the result is certainly not satisfactory, and contrasts very unfavourably with the result in Dr. F. Hughes Bennett's series of cases to which we referred last week.

EXPERIMENTAL EPILEPSY.

A COMMUNICATION has been made by M. Vulpian to the Académie des Sciences on the results of excitation of the white matter in the neighbourhood of the sigmoid gyrus. He asserts that the convulsions of epilepsy are manifested not only in the voluntary muscles, but also in those of organic life, as witnessed in the modification of the secretions, the dilatation of the pupils, and the like. He has sought to determine the influence of excitations of the cerebral white matter on the secretion of bile, pancreatic juice, and urine. Cannulæ were placed in the bile-duct, pancreatic duct, and ureters of the animals employed. Electrical stimulation was employed. The secretion of bile was found to be augmented; that of the pancreas was not influenced either way; that of the kidney was arrested. By curarising a dog and keeping up artificial respiration he has determined that excitations of the surface of the gyrus in question gave rise to a genuine attack of epilepsy of the involuntary muscular tissue. M. Vulpian believes that the last-mentioned experiment has not hitherto been carried out.

HONEST CRITICISM.

WE congratulate our contemporary, the *Grocers' Gazette*, on having vindicated the undoubted right of the press to point out tricks of trade which are injurious to the health of the public. If it were not permissible to put the community on its guard against adulteration and the selling of impure or bad goods as fit for use and of excellent quality, it would be useless to touch the subject of sound and unsound food at all. It seems strange that any manufacturer should have had the temerity to go before a court with so poor a plea as that urged against the *Grocers' Gazette*. Simple justice has been done, and the public interests have been secured. Our contemporary has done good service.

THE PIGMENTARY SYPHILIDE.

IN the April number of the *Monthly Journal of Cutaneous and Venereal Diseases* an excellent chromolithograph illustrates a brief original article by Dr. R. W. Taylor on the Pigmentary Syphilide. Many authorities, both at home and abroad, now recognise the existence of a certain chromatogenous affection peculiar to syphilis, which is variously designated the pigmentary syphilide and syphilitic leucoderma. Dr. Taylor comes to the conclusion that syphilis frequently causes a deep cutaneous pigmentation, which occurs in spots without any affection of the skin between the maculæ; he believes, also, that syphilis may cause pigmentation and leucoderma in the same case, as well as an abnormal distribution in the amount of pigment normally present in a given area of skin, so that there is a preponderance of the leucodermatous changes as compared with the pigmented maculæ.

"SIMULO" IN EPILEPSY.

IN the *Boletin Médico*, published at Trujello, Peru, Dr. Larrea y Quezada describes the treatment of his own case of epilepsy, when a boy of thirteen, by simulo, which is the fruit of a plant of the hyssop family—Capparis coriacea. The dose was forty-five grammes of the powder in wine night and morning. Though he had suffered from fourteen attacks, preceded by a distinct aura, his cure was immediate and complete. Since he has been in practice he has employed the drug in all cases of epilepsy, and also in nervous and hysterical cases, with the best results.

A CORRESPONDENT has written to us calling attention to the condition of the Salvation Army in the barracks at Clapton. He states that small-pox is now, and has for some time past been, very prevalent among the persons resident in the building; in fact, lately, scarce a day has passed without some patient being removed, and yet these people are allowed to hold meetings and to march through the streets, to say nothing of their going into the homes of the poor in the neighbourhood. If our correspondent's statements are correct—and we have no cause to doubt them,—the proceedings of the Clapton Salvationists, as a means of spreading small-pox, should engage the attention of the medical officer of health.

WHILST recently partaking of luncheon in a restaurant at Portsmouth, Retired Staff Surgeon Augustus Slight, R.N., died apparently in a fit. A post-mortem examination showed that the deceased, who was seventy years of age, had been suffocated by a piece of meat which was lodged in the throat. The inquest was held on the 9th inst., when the jury returned a verdict of accidental death. The deceased was assistant-surgeon of the *Wasp* at the storming of Sidon and the bombardment of St. Jean d'Acre in 1840, for which he was awarded the medal.

A MADRID medical journal of April 8th says:—"In Jativa the cases of 'suspicious disease' continue. This is a modern denomination for diseases which we are not able to classify, and for which a special column should be opened in our health bulletins. Up to the 6th inst. the official statement is as follows:—'Suspicious diseases (?) attacked, 6; cured, 4; died, 7; still on the sick list, 25. Of these 25, 8 are seriously ill, 2 are getting better, and 15 are convalescent.'"

THE member of the Rochester Town Council who recently stated that he believed there were nearly sixty cases of small-pox in Gillingham has written to the Gillingham Board of Health, saying that he had found he had overstated the total, and that he regretted having done so; but the statement was not made in public or at a council meeting, but in committee, and was not intended to appear in the newspapers.

THE prize for the best essay on the Prevention of Blindness, offered by the English Society for the Prevention of Blindness, has been awarded to a German physician, Dr. Fusch.

DR. and MADAME BRACHET have had the honour of being presented to the Queen during her Majesty's visit to Aix-les-Bains; and Madame Berthier, widow of the late Dr. Berthier, who attended Princess Beatrice during her stay at Aix two years ago, has had the honour of being received by her Royal Highness.

THE statement that small-pox had attacked the inhabitants and employés of the Japanese Village at Albert-gate has been contradicted by an inspector sent to inspect the building by the Local Government Board and by the Sanitary Committee of the Board of Works for the Westminster district.

A TELEGRAM from Marseilles to the Paris *Temps* states that orders have been given to the French authorities to impose three days' quarantine on all arrivals from Spain, on account of the suspicious disease prevalent in some parts of that country.

SIR ROBERT LOYD-LINDSAY, chairman of the National Society for Aid to the Sick and Wounded in War, has received from Mr. Kennett Barrington, its Commissioner at Suakim, a highly satisfactory account of the work done by the representatives of the Society in Egypt.

THE Academy of Medicine of Lima, Peru, is endeavouring to organise chemical and physiological laboratories and an anatomical and pathological museum. At present an especial study is being made on several important questions relating to prophylaxis and hygiene in infancy.

Pharmacology and Therapeutics.

BROMIDE OF ZINC.

THE following conclusions have been arrived at by M. Testa. Bromide of zinc in small doses diminishes sensation; in large doses it diminishes motility; finally, it may cause complete sensory and motor paralysis. The motor and sensory disorders may gradually pass away if the dose given be not too large. Bromide of zinc stops the frog's heart in diastole, but this effect takes some time to appear; its action is more like zinc than bromide of potassium, since zinc disorders sensation first and motion later, whilst bromide of potassium affects both sensation and motion at the same time, though the latter more than the former. Zinc in the bromide ought certainly to be modified in its action by the presence of bromine, and in mammals a certain degree of somnolence was observed. Bromide of zinc acts first on the peripheral terminations of the sensory nerves, and afterwards on the spinal centres, without, however, passing over the nerve trunks. An effect on the cerebrum cannot be denied seeing that somnolence has been observed after the administration of the drug, but the disorders of sensation and motion are independent of its cerebral effect.

BOLDO AND BOLDINE.

Boldo, either as an infusion or extract, which grows in Bolivia, has been employed for a long time in diseases of the liver. The essence and tincture were experimentally investigated by MM. Dujardin-Beaumetz and Vernes in 1874; diuresis and somnolence were the chief effects observed in animals. Boldine appears to be a glucoside, and is extracted from the leaves of boldo; it is obtained as a concentrated solution of an orange-yellow colour, and has an aromatic odour. In animals—guinea-pigs, dogs, rabbits—boldine given by the stomach, under the skin, or into the veins, causes marked drowsiness, which lasts a variable time, and passes into a condition of apparent death. A fatal dose causes death without exhibiting any reaction, and without convulsions. The fatal dose is ·2 centigramme per kilogramme of body weight. In physiological doses the induced sleep passes away without causing any disagreeable effects. In frogs, injections of boldine induce loss of sensation, and the instillation of some drops of boldine into the eye causes insensibility of the cornea like that produced by cocaine. The hypnotic action of boldine is exerted through the intermediation of the cerebral centres, for the somnolence does not appear if the brain be removed or the bulb be divided. In man, boldine administered to the extent of five or six grammes in divided doses has twice been followed by calm and profound sleep. M. Laborde is the author of these new experiments.

COLCHICINE.

M. Laborde has restudied the physiological effects of colchicine. In animals the subcutaneous injection of colchicine into a leg produces at first paralysis of the limb. The general symptoms observed were disorders of the circulation and respiration; digestive disturbances in the form of vomiting of food, next of bile, and finally of blood, were observed; diarrhœa, both of fetid and bloody stools, may occur, whereby a dog may lose a kilogramme of its body weight in the course of a few hours. Death may supervene *as the result of paralysis of respiration. A dose of forty* centigrammes given to a man caused a feeling of oppression at the epigastrium, violent headache, vomiting, diarrhœa, and fainting. A dose of from five milligrammes to one centigramme gave rise to nausea, some vomiting, and a little diarrhœa; the salivary and urinary secretions were also augmented.

THE ACTIVE PRINCIPLE OF SENNA LEAVES.

A paper which has been published in full in the *Pharmaceutical Journal* gives an account of some original investigations made by Dr. Ralph Stockman on the cathartic principle contained in senna leaves. The cathartic acid was separated after a good deal of trouble by means of baryta. The separated principle was proved to be a powerful cathartic by experiments on rabbits. Experiments made by injecting the cathartic acid, which has been proved by Dr. Stockman to be a coloured glucoside, into the subcutaneous tissues and jugular vein of rabbits, appear to show that the principle cannot cause purgation when introduced into the circulation. Very large doses were thus administered, and the animal simply appeared to be out of sorts for a few days, probably as the result of the operation. In all these cases the urine gave the caustic potash reaction, showing that the cathartic acid had been decomposed in the blood.

DETECTION OF ALKALOIDS.

The graphic method now so extensively adopted by physiologists working at the action of drugs on the heart has been used by M. Laborde in some researches on alkaloids. He states that a twentieth of a milligramme of aconitine in the blood suffices to give a graphic tracing of the beats of the heart which is absolutely characteristic of the action of aconitine. In a dog dead from the ingestion of a substance of doubtful nature, veratrine or aconitine, for example, if an extract of the vomited matters be injected into the system of an animal the heart gives tracings which M. Laborde asserts may be correctly assigned to this or that alkaloid.

THALLINE.

According to MM. Brouardel and Loye, thalline diminishes the respiratory capacity of the blood by destroying its hæmoglobin. Its action is said in this respect to resemble that of kairin and to differ from that of antipyrin, which, according to Henocque, has no deleterious influence on hæmoglobin. MM. Laborde and Rabuteau consider that the physiological effects of the different antipyretics cannot be regarded as properly worked out because of the variable chemical composition. M. Henocque states that his results with antipyretics have been uniform and characteristic, so that if the antipyrin be impure, the impurity is always of the same nature.

SULPHATE OF CINCHONAMINE.

Cinchonamine is an alkaloid found by M. Arnaud in the Remigia Purshiana (rubiaceæ), which is indigenous in Brazil. MM. Sée and Bochefontaine have investigated the physiological action of the soluble sulphate of cinchonamine on frogs, guinea-pigs, and dogs. The chief effects observed were progressive enfeeblement of the physiological functions of the central nervous system, convulsive phenomena, and weakening and slowing of the heart's action. Large doses cause rapid death by arrest of the heart in diastole, in frogs as well as mammals. Atropine is powerless to restore the movements of the heart after they have been stopped by cinchonamine. The toxic effects of the sulphate of cinchonamine are about six times greater than that of quinine, cinchonidine, and cinchonine.

BENZOLE IN RODENT ULCER.

The application of pure benzole to rodent ulcers is recommended, and has been practised, by Dr. Sherwell of New York. It does not cause pain, but destroys the sensibility of the parts, giving them a blanched appearance and causing a kind of mummification. After a time a scab is formed, which should be removed and more benzole applied. He suggests also the employment of benzole in cases of cancer of the os uteri, but it may be doubted whether its application to this site would prove efficacious.

PARALDEHYDE.

Dr. T. Suñol states in the *Independencia Médica* that he has used paraldehyde hypodermically in doses of half a drachm to one drachm in bronchitis, tuberculosis, jaundice, typhoid, rheumatism, gastritis, heart diseases, pleurisy, neuralgia, and alcoholic delirium, generally inducing a sleep of from two to six hours, a sleep calm and untroubled, and not followed by headache on awakening. He has only observed excitement in febrile patients. As it does not affect the beats of the heart, it is better than chloral in cardiac cases with much debility, and especially where there is fatty degeneration.

SYNTHESIS OF CONIINE (?).

The *Pharmaceutical Journal* states that M. de Coninck has synthetically prepared a liquid alkaloid isomeric with coniine. Six atoms of hydrogen were introduced into the molecule of β-collidine derived from the decomposition of cinchonine. This artificial alkaloid has been named "isocicutine;" M. Bochefontaine asserts that its physiological properties are like those of the alkaloid obtained from hemlock.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

THE Association of Members of the Royal College of Surgeons has recently forwarded a circular to each member of the College, in which is contained a brief account of the work done by the Association during the first year of its existence for the purpose of obtaining certain reforms in the projected new Charter of the College. After detailing the proceedings taken up to the time the requests of the Association were laid in writing before the Council of the College, the two main points in the requisition being (1) that Fellows and Members shall elect an equal number of representatives to constitute the Council, and (2) that in addition to a poll election at the College, voting by voting papers, to be sent to all Fellows and Members resident in the United Kingdom, shall be allowed, the committee of the Members' Association state that the Association of Fellows appear somewhat liberal in their views; they have proposed, amongst other things, that there shall be an annual general meeting of Fellows and Members, at which the annual report of the Council shall be presented, discussed, and, if approved, adopted; also that no alteration in the constitution and relations of the College shall be effected without the consent of the Fellows and Members, specially convened to discuss such alterations; and that on receipt of a requisition signed by thirty Fellows or Members the president shall convene a general meeting. These proposals, with the addition of representation of Members and election by voting papers, embrace nearly the whole of the preliminary question as far as the Members are concerned; but whether the Council will accede to the requisition is doubtful unless great pressure be brought to bear upon them, and the committee consequently conclude by urging all members of the College who have not already done so to join the Association, in this manner establishing a powerful and influential Association for the protection of the interests of the medical practitioner.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund held on the 14th inst., Sir N. W. E. Smart, K.C.B., M.D., Inspector General, in the chair, the sum of £67 was distributed among the several applicants.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.[1]

Typhoid Fever at York, by Dr. Airy.—The medical officer of health for the city of York reported last autumn an outbreak of enteric fever which had already caused 27 deaths. The cause did not appear to lie in the drinking-water nor in the milk-supply, but, according to his view, was dependent in some way on the condition of the subsoil water. Some obscurity, however, attached to the circumstances of the prevalence. Mr. North had made some lengthened investigation into the subject, and he found that from January to the middle of November there had been 315 attacks with 50 deaths, thus giving a high rate of mortality. The total population of York, according to the last census, was 49,530. According to Dr. Airy, York is divided into three registration sub-districts—Bootham, Micklegate, and Walmgate,—and the annual average "fever" death-rates for the ten years ending 1883 were 2·8 per 10,000 for Bootham and for Micklegate, and 3·8 for Walmgate. Fever has also fluctuated in the city; it was specially prevalent in 1875 and in 1881, whereas 1877 was distinguished for its comparative absence. The mortality had been at its height during the autumn months, culminating in October, and thus corresponding with general experience throughout the country at large. York, then, may be regarded as being habitually liable to fever in an endemic form, and this especially in the Walmgate district; and also to epidemic prevalences at occasional intervals. Dr. Airy then proceeds to describe in detail the physical circumstances affecting these three districts severally, to point out in what respects they differ, and to indicate the various localisations of the fever in the different portions of the several districts referred to. He next proceeds to discuss such questions as the water-supply, milk-supply, &c. The water-supply cannot be regarded as a satisfactory one, it being derived from the Ouse at a point below which it receives the drainage of many villages and much agricultural and other land. It is also dammed up below York by means of a weir and lock, and hence during periods of drought such as occurred last year any pollution might become concentrated and lead especially to affect the source near the intake. Dr. Airy is, however, inclined to think that at all times during the year the flow in the river was sufficient to enable him to eliminate the special source of danger which the backing up of sewage would have caused. Then, again, the water-supply being the same for the whole of the city, any injurious property it possessed would presumably affect the whole city impartially, whereas, as a matter of fact, the incidence of the fever was markedly upon three separate spots in the city. Local water pollutions in the mains or otherwise might have occasioned this special incidence; but after all the conditions likely to have led to any such occurrence had been thoroughly sifted, no ground could be found for any suspicion of the kind. Milk and other beverages as a cause of the disease had also to be set aside. Coming next to privies, &c., it would appear that York is not favourably placed, and there seemed no doubt but that infection had been spread by means of faulty structures; but the actual cause of the epidemic did not lie here. A good deal of attention has also been paid in York to disconnecting house drains, especially in the poorer parts of the city, and such connexions are hence eliminated as a cause of disease. The sewers were laid in 1854-56; they have their outfalls below the summer level of the Ouse; they have no intentional means of ventilation, and there is hardly any provision for their systematic flushing. The only means of relief from pent-up foul air which they have lies in untrapped street gullies, rain pipes directly connected with the sewers, and defectively trapped house connexions. Frequent complaint is made of the habitual sewer stink, and, according to Dr. Airy, York is from this cause in a state of chronic infection that probably accounts for its habitual fever prevalence. As one sewer chances to be more impregnated with infection than another, so one region or another would suffer most, and the specially foul conditions connected with the Foss sewer appeared fully to explain the habitual incidence of fever upon the Walmgate district. So much for the general fever prevalence in York. As to 1884, it deserves notice that the fever mortality for the third quarter of that year in the whole of the East Riding was more than double the average of that for the preceding five years. The summer was remarkably warm, the rainfall was much below the average, and so accumulation of sewage in drains and sewers would be specially favoured, and the offensiveness at certain outfalls is well remembered by many inhabitants of the city. Indeed, Dr. Airy is of opinion that throughout August there was a ripening of conditions exceptionally favourable to the development of typhoid poison in the York sewers, and he inclines to the view that such a gradual ripening must, sooner or later, have culminated in an outbreak of fever, even without the occurrence of any signal event that could be recognised as the determining cause. As to the ground air, it is highly probable that the special conditions of the autumn of 1884 may have led to the expulsion from the soil, by means of a rise in the subsoil water and otherwise, of foul air, and that such occurrences may materially have aided in the special prevalence from which York has suffered. The drawing-off of the Foss water and its subsequent rise had doubtless an influence in this direction; but such influences were probably local only, and would hardly account for the simultaneous outbreaks such as occurred in some large districts. How far meteorological conditions may have aided in this result is uncertain—we know too little about their influence to judge; but there was very little change of atmospheric pressure in the month of August. The report is an interesting one, and well deserves study. We are glad that it is one of those which have been placed on sale.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Kettering Urban District.—This town has in recent years effected substantial sanitary improvements, and during the past eight years there have been only five deaths from enteric fever in a population now reaching some 14,250. Last year there was but little infectious disease of any sort. The deaths under one year of age are, however, unsatisfactorily high. Last year they amounted to nearly 18 for every 100 births, a rate which is excessive. Mr. Dryland attributes it mainly to ill-feeding, soothing syrups, and neglect, conditions which are all but invariable in towns where female labour is employed. Some diarrhœa was brought about by the extreme drought, which caused a scarcity in the public water-supply, and in the effort to remedy this the supply became so muddy that people resorted again to old disused wells. Common lodging-houses and slaughter-houses are well looked after, the bakehouses are inspected with regularity, the system of public sewerage is being added to and perfected, vaccination is efficiently performed, and sanitary work in general would appear to be carried out under a system of regular supervision.

Chester-le-Street (Rural).—The Rural Sanitary Authority of Chester-le-Street has divided their district for public health purposes into two parts, each of which is co-extensive with a registration sub-district. The report for Chester-le-Street sub-district shows that during 1884 the death-rate from all causes was comparatively low, although both the mortality from zymotic diseases and the death-rate of children were excessive. Dr. Morris estimates the population of his district in the middle of 1884 at 24,500, but he omits to state on what basis the estimate is calculated. Based upon the rate of increase that prevailed between 1871 and 1881, the estimate would be considerably more; and judged by the birth-rate, which is given as 43·3, it would appear certain that the present population is not over-estimated. The death-rate last year was 19·3, slightly below the rate in the whole of England and Wales, and 1 per 1000 below the mean rate in the county of Durham. The deaths from the principal zymotic diseases were 69, which included 26 from scarlet fever (so constantly fatal in mining populations), 23 from diarrhœa, 9 from typhoid fever, and 2 from small-pox. These 69 deaths were equal to a rate of 2·9 per 1000. With regard to child mortality, it is stated that of the 472 deaths in the year, 241, or 51·1 per cent., were of children under five years of age, an undoubtedly excessive proportion, but giving no real clue to the true rate of child mortality, which can only be calculated upon the number of children living at the same ages. Infant mortality—that is, the deaths of infants under one year—was equal to 15·8 per cent. of the births registered, showing a marked excess. Dr. Morris appears to have debited the whole of the deaths in the union workhouse to his sub-district; if this be the case, it is an obvious oversight. Twenty-six cases of small-pox were reported in the district, but only two deaths were referred to this disease, and with regard to one of those cases the medical officer is "disposed to think that the cause of death was malignant scarlet fever." The authority, which has not yet seen the necessity to provide any hospital accommodation for infectious diseases, is to be congratulated at having at present escaped an epidemic outbreak of the disease. It is, however, impossible to say how many of the 26 deaths from scarlet fever might have been avoided if such accommodation had existed. It appears from the report that 67, or 13·7 per cent., of the deaths during the year were uncertified, in most cases because the deceased persons had been attended by unqualified, or at any rate unregistered, medical practitioners. One of these uncertified deaths was attributed to typhus; and with regard to this case the medical officer satisfied himself that, "whatever was the cause of death, it certainly was not typhus." Such a state of things is as bad for our national mortality statistics as it is for the public.

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[1] To be purhased of Knight and Co., 90, Fleet-street; Shaw and Sons, Fetter-lane; Haddon, Best, and Co., West Harding-street; and P. S. King and Son, King-street, S.W.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5804 births and 4271 deaths were registered during the week ending the 11th inst. The annual death-rate in these towns, which had been equal to 23·5, 23·2, and 23·1 per 1000 in the preceding three weeks, rose last week to 25·0, and exceeded the rate in any previous week of this year. During last quarter the death-rate in these towns averaged 21·9 per 1000, and was 2·3 below the mean rate in the corresponding periods of the nine years 1876–84. The lowest rates in these towns last week were 20·0 in Brighton, 20·5 in Leeds, 20·9 in Derby, and 21·2 in Norwich. The rates in the other towns ranged upwards to 33·8 in Preston, 35·8 in Huddersfield, 36·0 in Manchester, and 41·9 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased from 377 to 465 in the preceding six weeks, further rose to 478 last week; they included 164 from measles, 127 from whooping-cough, 49 from diarrhœa, 40 from small-pox, 35 from "fever" (principally enteric), 34 from scarlet fever, and 29 from diphtheria. No death from any of these diseases was recorded last week either in Leicester or in Bolton, whereas they caused the highest death-rates in Manchester, Sunderland, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Huddersfield, Sunderland, and Newcastle-upon-Tyne; from whooping-cough in Sheffield and Bristol; from scarlet fever in Sunderland and Wolverhampton; and from "fever" in Halifax and Norwich. The 29 deaths from diphtheria in the twenty-eight towns included 15 in London, 4 in Cardiff, 3 in Birmingham, and 2 in Portsmouth. Small-pox caused 69 deaths in London and its outer ring of suburban districts, 2 in Sunderland, 1 in Manchester, and 1 in Leeds. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had increased from 830 to 879 in the previous two weeks, further rose last week to 910; the admissions also rose to 185 last week, from 179 and 141 in the preceding two weeks. The Highgate Small-pox Hospital contained 91 patients on Saturday last, 22 having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 448 and 478 in the previous two weeks, further rose last week to 512, and exceeded the corrected average by 2. The causes of 109, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Sheffield, Hull, and Sunderland.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 23·3 and 25·0 per 1000 in the preceding two weeks, declined again to 23·4 in the week ending the 11th inst.; this rate was 1·6 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 5·0 and 17·5 in Perth and Aberdeen, to 27·3 in Paisley and 29·0 in Glasgow. The 570 deaths in the eight towns included 24 which were referred to measles, 17 to whooping-cough, 10 to "fever" (typhus, enteric, or simple), 8 to diarrhœa, 6 to scarlet fever, 3 to diphtheria, and not one to small-pox; in all, 68 deaths resulted from these principal zymotic diseases, against 73 and 84 in the preceding two weeks. These 68 deaths were equal to an annual rate of 2·8 per 1000, which was almost identical with the rate (2·9) from the same diseases in the twenty-eight English towns. The 24 cases of measles, of which 22 occurred in Glasgow and 2 in Dundee, showed a further increase of 1 upon the numbers in the previous two weeks. The deaths from whooping-cough, on the other hand, declined to 17, from 35, 32, and 34 in the preceding three weeks; 10 occurred in Glasgow, and 2 each in Dundee, Leith, and Paisley. The 10 deaths referred to "fever" showed an increase upon recent weekly numbers, and included 6 in Glasgow and 2 in Greenock. The 8 deaths attributed to diarrhœa were 12 below the number in the corresponding week of last year. The 6 fatal cases of scarlet fever, of which 4 occurred in Glasgow, showed a decline of 5 from the number in the previous week. It appears that in Scotland chicken-pox is still classed as small-pox; this is contrary to the classification adopted in the English and Irish returns since 1881. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 122 and 130 in the previous two weeks, further rose to 134 last week, and were 22 above the number returned in the corresponding week of last year. The causes of 77, or nearly 14 per cent., of the deaths in these Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·4 and 33·6 per 1000 in the preceding two weeks, further declined last week to 32·2. During the thirteen weeks of last quarter the death-rate in the city averaged no less than 34·0 per 1000; whereas in London and in Edinburgh the rate did not exceed 20·8 and 20·0 respectively. The 218 deaths in Dublin last week showed a further decline of 9 from the high numbers in the preceding two weeks, and included 29 which were referred to the principal zymotic diseases, against 32 and 24 in the previous two weeks; 19 resulted from measles, 4 from diarrhœa, 2 from "fever," 2 from diphtheria, 1 from scarlet fever, 1 from whooping-cough, and not one from small-pox. These 29 deaths were equal to an annual rate of 4·3 per 1000, the rates from the same diseases not exceeding 2·7 in London and 0·8 in Edinburgh. The fatal cases of measles in Dublin, which had been 16, 12, and 13 in the preceding three weeks, rose last week to 19, and exceeded the number in any previous week of this year. The deaths referred to "fever," on the other hand, showed a further decline from recent weekly numbers. The 2 deaths from diphtheria were above the weekly average. Nine inquest cases and 5 deaths from violence were registered; the 54 deaths in public institutions were considerably below the average in recent weeks. The deaths both of infants and of elderly persons somewhat exceeded the number in the previous week. The causes of 30, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Dr. Doyle Glanville has gone to the Soudan with the New South Wales Contingent as Staff Surgeon. Dr. Glanville was attached to Colonel Durnford's column, consisting of 2000 men, the whole of whom, including Colonel Durnford and the 1st 24th Regiment, were massacred with the exception of some thirty survivors only. Dr. Glanville escaped, having been ordered to march out the night previously with a party of reconnaissance, and was three miles away from camp when it was attacked. He was then placed on the medical staff of General Wood's column, and served with the flying column, and was present at the battle of Ulundi, when he was mentioned in Sir Evelyn Wood's despatches for distinguished conduct, published in the *London Gazette*, August 21st, 1879. After the battle of

Ulundi the column was disbanded, and Dr. Glanville was then attached to the 1st King's Dragoon Guards, Lord Wolseley's military escort, and proceeded with them through the Transvaal.

War Office.—Army Medical Staff: Surgeon-Major Albert Benjamin Robinson is granted retired pay, with the honorary rank of Brigade Surgeon. Surgeon-Major James Henry Ussher, M.B., has retired on temporary half-pay.

Militia Medical Staff.—Surgeon Thomas Dodson Palmer, 8th Brigade, North Irish Division, Royal Artillery, to be Surgeon-Major.

Admiralty.—The following appointments have been made: Staff Surgeon Alexander Flood, to the *Forward;* Staff Surgeon Stewart F. Hamilton, to the *Dolphin;* Staff Surgeon Charles W. Maynard, to the *Penelope;* Staff Surgeon Michael Fitzgerald, additional, to the *Hibernia;* Staff Surgeon T. D. Gimlette, to the *Euryalus;* Fleet Surgeon Edward Meade, to the *Iron Duke;* Staff Surgeon William F. Spencer, to the *Triumph;* Staff Surgeon Henry J. Madders, to the *Duke of Wellington;* Surgeons Henry F. Kiewiez and C. L. Nolan, to the *Iron Duke;* Surgeon Robert F. Yeo, to Sheerness Dockyard; Surgeon Justin F. Donovan, M.D., to Malta Hospital; and Mr. Samuel Hamill, to be Surgeon and Agent at Burnham, Brancaster, and Thornham.

The undermentioned Surgeons have been promoted to the rank of Staff Surgeons in Her Majesty's Fleet—viz., Richard Dormer White, M.A., M.D.; John Wilson, M.A., M.D.; Henry John Madders, M.D.; Alexander Flood, Michael Fitzgerald, Stewart Frazer Hamilton, and Charles William Magrane.

In accordance with the notice appearing in the *London Gazette* of May 21st, 1884, Surgeon Thomas Desmond Gimlette has been promoted to the rank of Staff Surgeon in Her Majesty's Fleet.

In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon Henry Scanlan has been placed on the retired list of his rank.

Artillery Volunteers.—2nd East Riding of Yorkshire: Acting Surgeon Arthur Henry Robinson, M.D., resigns his appointment.

Rifle Volunteers.—3rd Hampshire: Acting Surgeon Arthur Vernon Ford, from the 4th Volunteer Battalion, the Essex Regiment, to be Acting Surgeon.—2nd Lanarkshire: Lieutenant Robert Thin Craig Robertson, M.B., is appointed Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE MEDICAL BILL AND THE SCOTCH UNIVERSITIES.

To the Editor of The Lancet.

Sir,—I read with some surprise in your leader of April 11th that Sir Wm. Jenner, in his address at the College of Physicians, attributed the withdrawal of the Medical Bill of last year to the "determined opposition of Scotch universities." Now, I yield to no one in my respect for the personal character and high professional attainments of our President, but he has been led into error in this case by an imperfect consideration of the subject, and his position in Trafalgar-square and as an ex-Royal Commissioner does not entitle him to override the facts of the case. I happened to hear every word that was spoken on the three occasions when the Bill was under discussion, and can remember nothing which would imply determined hostility on the part of the Scotch universities, whose adverse influence, if exerted to the full, would no doubt have been disastrous, if not fatal, at any period of legislation. If you will refer to Hansard, you will find that after two full debates on the second reading a further stage was reached on June 30th, when Mr. Mundella moved "that the Speaker do now leave the chair." This was agreed to after some wrangling from quarters not usually favourable to the unobstructed work of the House, and it was further arranged that the Committee should be taken in not less than a week, so that amendments might be put down and duly criticised. Then came the collapse. The action of the House of Lords suddenly paralysed legislation, and Mr. Gladstone announced that he should withdraw all Bills which had not passed through the grand Committees. As the Medical Act Amendment Bill came under this hard-and-fast rule, it had to be ruthlessly flung overboard without reference to popularity, or opposition, or stage of progress, and neither Mr. Mundella nor the House, nor any university or corporation, nor influence, however powerful, could save it from a fate which it shared with many others. The general impression was that if accident had not thus abruptly checked its career, the Bill had a good chance of passing; but the opinion was equally unanimous that Sir Lyon Playfair's amendment would have materially smoothed the way to the ultimate goal of success, and would certainly have saved the licensing bodies from damage, and possibly from ruin. I have always been surprised at the equanimity with which universities and corporations seemed to view their future prospects as affected by the Bill, and by the small amount of alarm which they showed at its destructive tendencies. It is surely utopian to believe that the ordinary rank and file of medical students, whose time and money are not too abundant, will wish to obtain anything beyond the simple right to practise conferred by the Conjoint Board, and the purveyors of fancy qualifications would soon perish from sheer inanition under the provisions of the Bill. Sir Lyon Playfair's amendment would have prevented these risks, and his able advocacy of his views contributes, if that were possible, to increase the estimation in which he is held in the House as an able and eloquent exponent of all that is soundest and best in education and science.

I am, Sir, your obedient servant,

Reform Club, April 14th, 1885. Robert Farquharson.

*** Dr. Farquharson's views are entitled to much respect; but he will not shake the general opinion, as well as Sir William Jenner's, that the Scotch Universities, represented in Sir Lyon Playfair's amendment, really sealed the fate of the Bill which they had previously assented to. The other opposition was unreal and confessedly obstructive; that of Sir Lyon Playfair was subtle, but fundamental and serious. We are sorry that it should have the countenance of Dr. Farquharson, who, as a most worthy alumnus of the University of Edinburgh, should not be so fearful of the interests of his *alma mater.* Does he carry his admiration of Sir Lyon so far as to justify the way in which he misled the House by conjuring up a community with an inadequate supply of medical men, by largely overstating the waste of the profession, which, on the contrary, is overstocked and underpaid?—Ed. L.

THE COUNCIL OF THE ROYAL COLLEGE OF SURGEONS AND THE ASSOCIATION OF MEMBERS.

To the Editor of The Lancet.

Sir,—May we be permitted through the medium of your columns to protest, on behalf of the Association of Members of the College, against the unconstitutional course of action which has been adopted by the Council of the Royal College of Surgeons of England with regard to the new Charter.

In March of last year, at the general meeting of Fellows and Members, a resolution was passed requesting "that no *alteration in the constitution or relations of the College* should be effected without the consent of the Fellows and Members convened to discuss such alteration." This request has recently been repeated at the College by the delegates of the Association of Fellows, but has been ignored by the Council, who have determined to forward without delay to the proper authorities the proposed alterations in the Charter, *on the ground that they were, in part,* submitted to the general meeting in March, 1884. If the proposed form of the new Charter had been acceptable to the profession, the Associations of Fellows and Members would not now be in existence. The Fellows and Members collectively *may* be said to constitute the College, and they are agreed that no Charter should be presented to the Home Secretary without their united approval. It would appear, therefore, that the Council are attempting to legislate in direct opposition to the wishes of their whole constituency.

Furthermore, according to the present Charter no meeting of the Fellows and Members is permitted, unless the Council *approve the object of such meeting*. This monstrous infringement of the liberty of the subject has been embodied in the draft of the new Charter with only a slight alteration in the wording. It seems hardly credible in these days of freedom of the press and liberty of action that a large, intelligent, and educated body of Englishmen should be debarred from holding public meetings for the discussion of questions relating to their government, their dignity, and their interests in a country which has been immortalised by the Poet Laureate as

> "The land where, girt with friends and foes,
> A man may speak the thing he will."

Since the Council of the College have persistently refused to consider the interests of its Members, and have turned a deaf ear to their appeals, the Association of Members have come to the conclusion that the only remedy for the unsatisfactory state of affairs which now exists is for Members of the College to obtain the right of electing their own representatives—either Fellows or Members—to sit upon the Council. In order to effect this reform, they have determined, much as they regret the necessity for such a step, to petition the Home Secretary to refuse to grant any Charter which does not provide for the representation of Members on the Council. A petition has been drawn up, and has already been signed by nearly a thousand Members. The Association of Members have, furthermore, determined to invite all Members of the College to attend the annual general meeting of the Association for the purpose of discussing what further steps must be taken in order to obtain such reforms as are felt by the profession to be most urgently needed in the administrative department of the Royal College of Surgeons. The meeting will be duly advertised in the medical journals, and will be held on May 5th, at 4 P.M., in the Westminster Town Hall.

Trusting to the ready manner in which you have always advocated any measure for promoting the interests of the medical profession, we take the liberty of transmitting to you this protest against what we consider to be a most unconstitutional measure on the part of the College authorities. We beg to subscribe ourselves, Sir, your obedient servants,

WARWICK C. STEELE,
J. NIELD COOK,
W. ASHTON ELLIS,
Hon. Secs. to the Association of Members of the Royal
College of Surgeons.

Western Dispensary, Westminster, April 13th, 1885.

INFECTIVE PHTHISIS.

To the Editor of THE LANCET.

SIR,—With reference to that part of Dr. Weber's Croonian lecture which appeared in your impression of March 14th, which implies that the power of imparting their own properties to outsiders inherent in the infective changes that take place in the lungs of phthisical patients "has been surmised long ago, even before the history of inoculation, which dates back at least as far as 1843," allow me to observe that this "surmise" is entitled to a far higher ancestry or antiquity than is claimed for it here. I published in THE LANCET of Dec. 4th, 1880, a short note of an occurrence in point which I took from a little brochure, entitled "Cardinal Allen's Defence of Sir William Stanley's Surrender of Deventer," Chetham Society's publications, p. 69, and I find from that very accessible compilation, Copland's Dictionary, article "Tubercular Consumption," p. 1125, that "although the occasional transmission of this disease by infection was believed, not only by Galen, but also by ...... several other writers [whose names he gives], yet that 'it' [the question of transmission by infection] still remains in doubt." Whether this doubt will survive the recent discovery of a special bacillus I will not here stop to inquire. What I wish to do is to point to the fact that a belief in the infective character of "pulmonary phthisis"—be the same acute or chronic—has existed from a much earlier date than that given above. Smollett, I think it was, showed that such was the impression, in his day, in Italy and elsewhere in the south of Europe.

"There was," says Ennemoser,[1] "a universally accepted belief in ancient times that living together and breathing upon any person produced bad as well as good effects ...... and pure virgins and young children were supposed able to free persons from diseases by their breath." He quotes the case of David from the Book of Kings, Bacon, Galen, and several others in this direction, and adds that "Rudolph of Hapsburgh is said, ... when very old and decrepit, to have kissed, in the presence of their relatives, the daughters and wives of princely, ducal, and noble personages, and to have derived strength and renovation from their breath. The Emperor Frederick Barbarossa, near the end of his life, was advised by a Jewish physician to have young and healthy boys laid across his stomach instead of using fomentations; and Johannes Damascenus, or Rabbi Moses, relates that for lameness and gout nothing better could be applied than a young girl laid across the affected part."

Discussing this question from this very standpoint in 1666, Gideon Harvey, M.D., whose book, called "Morbus Anglicus, or the Anatomy of Consumption," gave rise to the name "English disease," for this ailment, after observing that "the spring is bad for consumptives," adds (p. 3) that, "considering its malignity and catching nature, it may be enumerated with the worst epidemicks, since, next to the plague, pox, and leprosy, it yields to none in point of contagion, for it is (he says) no rare observation here in England to see a fresh-coloured, lusty young man yoked to a consumptive female, and him soon after attending her to the grave. Moreover, nothing we find (he continues) taints sound lungs sooner than inspiring the breath of putrid, ulcered, or consumptive lungs, many having fallen into consumptions only by smelling the breath or spittle of consumptives; others by drinking after them; and, what is more, by wearing the cloaths of consumptives, though two years after they were left." There was, of course, exaggeration here, but even that tends to show the current of educated thought in his time, and many of his professional contemporaries held similar views.

William Salmon, whose book, entitled "A Complete System of Physick," appeared in 1686, and who was, moreover, a firm believer in the hereditary transmission of this complaint, says in his "Chapter of a Consumption," p. 278, that "contagion may also be referred hither—i.e., as a cause for them who live familiarly with consumptive people; as we have an instance in a woman that was no way predisposed to a consumption, and yet by lying with a consumptive husband she died of one. You may (he continues) find also other instances in Riverius"; and James, whose ponderous "Dictionary" is dedicated to Dr. Mead, does not hesitate to affirm that "if the miasma of this disorder is not sufficient to induce a phthisis, it is nevertheless capable of promoting it, if there is already a disposition to it." He adds that "this doctrine is confirmed to us by some of the most celebrated physicians," and he quotes several of these in point.

I am, Sir, yours obediently,
WM. CURRAN.

Auriol-road, West Kensington, March, 1885.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

THE LATE SMALL-POX EPIDEMIC IN DURHAM.

DR. BARRON, the medical officer of health for the city of Durham, refers in his report to the late small-pox visitation. A very severe epidemic of small-pox occurred during the past year; about 400 cases came to the knowledge of the sanitary authority, of which 31 proved fatal. Dr. Barron remarks: "So far as I have been able to discover, the majority of those who died from the disease had never been vaccinated, and of the rest none have been vaccinated since infancy." "One result of the epidemic," Dr. Barron says, "has been to show that a large proportion of the community escaped vaccination," which points to a more stringent carrying out of the Vaccination Acts as a necessity in the future. Dr. Barron says that the epidemic, which began early in March, caused little alarm until the end of September, when it began to assume serious proportions. There was no hospital for the isolation of cases. The sanitary authority and the people themselves seemed blind to the impending danger; it was not until the alarming spread of the disease in October began to cause a wide-spread panic that the county magistrates came forward with the offer of the barracks as a temporary hospital, and the good that has resulted from this public-spirited step no one will venture to deny. Dr. Barron, in his valuable and timely report, urges upon the authority to no longer hesitate in providing a permanent hospital for the reception of infectious cases, and he points out that the free gift by the Chapter of Durham of a site whereon to build this hospital lessens the difficulties which formerly stood in the way, and he further points out that it would be a great assistance in the stamping out of infectious diseases if the authority provided themselves with a disinfecting chamber fitted with the necessary apparatus for the disinfection of bedding, clothing, and other articles, and urges also the need of providing a mortuary, which he has frequently recommended to their notice.

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[1] The History of Magic, Bohn's Library, vol. I., pp. 117 18.

MIDDLESBROUGH DISTRESS AND THE DEATH-RATE.

At the last meeting of the Middlesbrough Town Council the high death-rate of the borough came under consideration and the medical officer of health, Dr. Malcolmson, said that the death-rate of the town was increased in a marked degree by illness amongst young children, to a great extent having its origin in destitution. He said that in many of the houses there was not a single blanket, and many of the children had not a single article of flannel underclothing, besides being very insufficiently fed. He was asked if he could suggest any remedy, and he at once said that providing each child with a quart of milk daily, some flannel underclothing, and a blanket at night would tend more than anything else he could suggest to a diminution of the death-rate.

MUNIFICENT BEQUEST OF A DURHAM COAL-OWNER.

I have before mentioned the benefactions of Mr. John Eden of Beamish-park, Durham, to the Durham County Hospital Building Fund. This gentleman, who was an extensive owner of coal royalties, and possessed of immense wealth, died on the 4th ult. at his town residence, Winlaton-crescent, London, at the advanced age of ninety-one, and it has transpired that he has left a legacy of £10,000 to the Durham County Hospital.

THE MEASLES EPIDEMIC AT SUNDERLAND.

The medical officer of health for Sunderland, in his fortnightly return of the mortality in the town, states that during the past fortnight there were 193 deaths, or a rate of 40 per 1000 per annum, against 216 deaths in the preceding fortnight. He (Mr. A. E. Harris) further states that during the past two weeks there were 63 deaths from measles and 33 from diseases of the respiratory organs, or a total of 96.

ALNWICK INFIRMARY.

The many friends of Dr. Brown, late house-surgeon of the Alnwick Infirmary, left in the north will be happy to know that he has obtained the appointment of surgeon to the Red Cross, or National Aid Society for the Sick and Wounded in War. Dr. Brown is already on his way to Cairo, to enter on his duties; and it is certain that he will be accompanied in his mission and work with the best wishes of all who had the pleasure of his acquaintance.

Newcastle-on-Tyne, April 14th.

EDINBURGH.

(*From our own Correspondent.*)

A NEW LABORATORY.

AT a recent meeting of the Royal College of Physicians it was decided to establish a laboratory for experimental work in connexion with the College Library and Hall in Queen-street. The plan that is to be carried out will certainly place great facilities for original work at the disposal of the Fellows. The laboratory is to be fitted with all modern improvements in the way of scientific apparatus and the usual requisites, and the services of a skilled assistant are to be constantly at the disposal of any intending workers. This arrangement will afford, even to those engaged in busy practice, the opportunity of working up cases of special interest, for a few hours' notice to the assistant will suffice to place every requisite in readiness for their use; and the sacrifice of time usually necessary for the arrangement of minor details will thus be entirely obviated. The project is an admirable one, and will doubtless be carried out in a manner not unworthy of a body which maintains one of the largest and best appointed medical libraries in the world; and it can apply the large fund at its disposal to no more beneficial and praiseworthy purposes than these.

ERECTION OF A BOARD SCHOOL AND PUBLIC BATHS.

One of the oldest and most sacred objects of medical interest in Edinburgh has suddenly and silently vanished. The old infirmary of Monro Primus and of Provost Drummond, which till within the last few weeks has stood empty and forlorn, though very picturesque, has succumbed to the reforming efforts of an energetic Town Council and is making way for a large Board-school and handsome public baths. The latter especially have long been a great desideratum in Edinburgh, and the proposed structure will do much towards satisfying the requirements of the city in this respect. Commodious swimming and plunge baths are to be provided, and two extensive public laundries are to be attached to the premises; these will be a great boon to the crowded population of the district in which the building is to be constructed. Although one is bound to rejoice in the material advantages which the alterations will effect, one can but feel a pang at parting with the quaint old building where the fame of Edinburgh as a medical school was made, and where the vivid recollections of so many find a centre. Nor is it only to old students of the Edinburgh school that this building has a special interest: an even wider circle think with a touched interest of the scene where the saddest and most thrilling part of "Rab's" career was enacted. It is fortunate that in this case the hand of change brings with it little of a real desecration.

WORK AT THE MEDICO-CHIRURGICAL SOCIETY.

At the meeting of the Medico-Chirurgical Society held on April 1st several cases of considerable interest were exhibited. Mr. Joseph Bell showed a patient from whom he had removed the whole of the os calcis and a portion of the astragalus subperiosteally, the insertion of the tendo Achillis being preserved. The whole of the removed bone has been replaced by osseous growth from the periosteum, and a useful foot with normal movement at the ankle has been the result. Mr. A. G. Miller exhibited a patient suffering from ununited fracture of the scapula. The case was one of a severe railway injury, and there were complications in the shape of a dislocation of the shoulder joint and fractures in other parts of the body. The fracture of the scapula was recognised at the time of the accident, but the patient absolutely refused to submit to any retentive treatment. The symptoms which are present furnish some points of great interest in regard to a differential diagnosis. In one position of the parts the fracture closely simulates subcoracoid dislocation; there is flattening of the shoulder, and a slight forward bulging is seen immediately below the coracoid process. The distortion can, however, be completely removed by drawing the elbow upwards, and during this movement the tip of the coracoid process itself is felt to glide in an upward and inward direction. Whether the limb be in the distorted or in the natural position, the patient can perform all normal movements at the shoulder-joint. The movement of the coracoid process shows that it is involved in the fracture, and the diagnosis arrived at is that of a fracture of the surgical neck of the scapula, with stretching of the coraco-clavicular ligaments; the line of the fissure running through the supra-scapular notch and separating the coracoid process along with the glenoid cavity, as was described by Sir Astley Cooper. Mr. Joseph Bell showed a number of gall-stones removed by operation from an ulcerated gall-bladder, which communicated by a sinus with the external abdominal wall. Dr. Littlejohn, the president of the Society, exhibited a preparation of the air passages from a case of carbonic oxide poisoning, which illustrated the great congestion of the mucous surfaces present in that condition. Dr. R. Milne Murray then read his paper on the "Cessation of Respiration under Chloroform and its Restoration by a New Method." The paper was based on some important observations that he has made recently upon the administration of chloroform to rabbits. By means of an ingenious contrivance, Dr. Murray was able to regulate exactly the strength of the chloroform vapour which the animals inhaled. The effects on the respiration were recorded by a new method, in which a manometric recorder, indicating equal increments of pressure by equally increased excursions of the recording style, was substituted for the ordinary tambour recorder, which, after a certain degree of pressure is arrived at, fails in that respect. The readings from the recording apparatus were neatly mounted for exhibition, and by passing them round amongst the members present many of the most important parts of the paper obtained remarkably clear illustration and confirmation. One point of great practical importance indicated by these graphic methods was that in deep narcosis the respiratory heavings of the thoracic walls may go on to all appearance perfectly, and yet absolutely no vapour enter or leave the chest. Dr. Murray considers this condition to be one of respiratory incoördination, the motor coördinating centre being affected, resulting in a "respiratory stammer," in which, although the thoracic walls rise, there is no depression of the diaphragm, but a contraction of the abdominal muscles, which nullifies the effect of thoracic expansion. As a result of his experience in cases of suspended respiration from the use of chloroform, Dr. Murray strongly insists on the importance of withdrawing the chloroform vapour from the lungs before commencing to introduce pure air. He advocates the introduction of a tracheal catheter in the human subject in such cases, and the removal by suction of as much of the vapour as possible before inducing artificial inspiration by the ordinary means. In rabbits he found that where this method was adopted resuscitation could be achieved even after a prolonged suspension of respiration, whereas were the ordinary means adopted, a successful issue was rarely attained.

IRELAND.

(*From our own Correspondent.*)

VISIT OF THE PRINCE OF WALES.

THE honorary degree of Doctor of Laws of the Royal University of Ireland was conferred on His Royal Highness last week; and on the same occasion the Princess of Wales received the honorary degree of Doctor of Music. At the University of Dublin an illuminated address was presented by the Senate of the University, and, at the request of His Royal Highness, the provost granted the undergraduates a term. Of the numerous addresses presented, I shall merely llude to those from the Royal College of Surgeons, the College of Physicians, and the Academy of Medicine. The address from the College of Surgeons alluded to the foundation of that institution by Royal Charter granted by George III., and stated that the College, unswerving in loyalty, uninfluenced by political or sectarian feeling, had never relaxed its efforts efficiently to discharge the trust confided to it by improving the profession, and thus promoting the welfare of the nation at large, and particularly by providing a sufficient number of properly educated surgeons, as well for the public in general as for the army and navy. The College of Physicians in their address referred to the satisfaction the visit of the Royal Family had produced, and alluded to the favour the Prince had always extended to their profession, as shown by the interest he had displayed in its efforts for the advancement of medical science and the preservation and improvement of the health of the nation.

HONOURS FOR THE MEDICAL PROFESSION.

It has been suggested that during the visit of the Prince of Wales to Ireland an opportunity will arise for the recognition of the long-deferred claims of the medical and surgical members of the profession in Dublin to the bestowal of honours by the Crown. Since the days of Sir Philip Crampton and Sir Dominic Corrigan, no surgeon or physician in this country has received a share of the numerous baronetcies bestowed by the Government; and this neglect has been a grave source of regret, as appearing to mark their inferiority as regards their English and Scotch brethren. It would be invidious for me to mention names, but there are several, both medical and surgical, who are eminently qualified for the honour in question.

RICHMOND DISTRICT LUNATIC ASYLUM, DUBLIN.

In the report of this asylum for the past year, Dr. Lalor, the resident physician, states that he has been enabled lately to carry out a useful measure in the separation of the epileptic from the general insane, and the grouping of a comparatively small class, consisting of them and the very aged and infirm, in a building to themselves, with access to the recreation rooms. Although the arrangement has only been a short time in operation, the beneficial results of the change have been acknowledged. The total cases under treatment during 1884 were 1519, the daily average being 1068; and it is interesting to note as an indication of the method of treatment that the daily average of patients employed in one way or another was 860.

RETIREMENT OF DR. BRODIE, LOCAL GOVERNMENT BOARD INSPECTOR.

At a meeting of the Poor-law medical officers of the Cork district, held on the 4th inst. at the Royal Cork Institution, Dr. Wycherly, J.P., High Sheriff, in the chair, the following resolution, proposed by Dr. O'Callaghan and seconded by Dr. Golding, was adopted:—"That the Poor-law medical officers of the Cork district cannot permit Dr. Brodie to sever his connexion with them without testifying in a proper manner their appreciation of his character as an inspector; that the necessary steps be taken to present Dr. Brodie with an address and testimonial on his retirement; and that Dr. Donovan be requested to act as secretary, and Dr. O'Connor, jun., as treasurer." Several who were unable to be present at this meeting have expressed their intention to co-operate in the movement.

ALEXANDER MEMORIAL PRIZE.

The triennial prize, founded in memory of the late Dr. Alexander, Director-General of the Army Medical Department, consists of a gold medal value £10, with £50 in money, and is open to competition by officers of the Army Medical Staff. This year it was gained by Surgeon John Martin, who is now in Egypt, for his essay on "Antiseptic Surgery, and its Application in Military Hospitals and in the Field." It is very creditable to Surgeon Martin, who is a native of Cork and received his professional education at the Queen's College, that this is the second occasion upon which he has obtained this distinction, the subject of his former essay having been "On the Influence of Drinking-water in causing Enteric Fever and Cholera."

Dublin, April 14th.

PARIS.

(*From our Paris Correspondent.*)

DEATH OF A LADY DOCTOR.

THE death of Mrs. Emilie Bovell-Sturge, Doctor of Medicine of the Faculty of Paris, and Officier d'Académie, occurred at Nice on the 2nd inst. Mrs. Bovell-Sturge began to study medicine at Edinburgh in 1871, but finding the way to successful study barred there, she went to Paris in 1873, where she took her degree in 1877. The subject of her thesis was "Les Phénomènes congestives consecutives aux Attaques de l'Epilepsie et de l'Hystéro-Epilepsie," for which she was highly complimented. After having obtained the Doctorate of Paris, she went to London to commence practice, and there married Dr. Allen Sturge. Soon after this she was appointed physician to the new Hospital for Women in the Marylebone-road, which post she held till she was compelled to leave London on account of her health, in October, 1881, when she was accompanied by her husband to Nice, where they both settled in practice. She has read papers at the Congrès d'Hygiène at Paris in 1878, on the Improved Industrial Dwellings in London; at that of the Hague last year on the method employed in England for dealing with the question of Pauper Children; and before the Société Médicale de Nice on "Some Points in the Pathology of Fibroid Phthisis." Mrs. Bovell-Sturge very modestly limited the sphere of her work to the diseases of women and children, without disconnecting herself from questions of general professional interest.

THE FRENCH SURGICAL CONGRESS.

The first Congrès Français de Chirurgie, which took place at Paris from the 6th to the 12th inst., was presided over by Professor Trélat. Before entering into the technical objects of the meeting, a discussion took place as to whether other cities than Paris could not be selected in rotation for the seat of the meeting. It was decided that Paris should be the constant *locale* of future congresses. Another question arose as to the period of the annual meeting, as that at which it has just taken place has for many reasons been found to be particularly inconvenient. It has therefore been decided that it should be held in the second fortnight of October of each year. M. Trélat then addressed in neat terms a welcome to the foreign visitors, and passed in review the various discoveries which have actually renovated surgery, and given it an impetus which has been taken advantage of for the last twenty years. In doing this he recalled the discoveries of anæsthesia and of antisepsis, with which he connected the honoured names of Pasteur, Lister, and Alphonse Guérin. He showed that, thanks to these conquests, the limits of surgery have been considerably extended, and that the rightful claim of surgery to be an art based on science has been fairly established. He then inquired as to whether in this renovation and rapid extension, in which nations and individuals have made such gigantic strides, French surgery has in any way lost the high reputation it has hitherto held among other nations. The answer of course would be in the negative. In looking over the subjects that were discussed at the Congress, I cannot say that there has been anything particularly new or important brought forward.

THE INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY.

To your note in The Lancet of last week on the International Congress of Hydrology and Climatology, which is to be held at Biarritz in October, 1886, I may add that for the sum of 12 francs anyone may become a member. Application should be accompanied by a post-office order for the above sum, which will entitle each member to—(1) the documents relative to the different sections of the Congress, to the subjects that will be brought before it, and to a detailed plan of the excursions; (2) a card giving members the right to travel by rail to Biarritz at a reduced fare of 50 per cent.; (3) a memorandum giving a detailed account of the price of lodgings, &c. The Committee of Organisation particularly requests that those desirous of becoming members should make known their intention as soon as possible. Further information may be obtained from Dr. Durand-Fardel of Paris, or from Dr. Garrigou of Toulouse.

Paris, April 14th.

MEDICAL NOTES IN PARLIAMENT.

The Lunacy Acts Amendment Bill.

Owing to the absence of the Lord Chancellor from the House of Lords this week, in consequence of the decease of the Countess of Selborne, the second reading of the Lunacy Acts Amendment Bill has been postponed until Tuesday next.

On Monday, the Burgh Police and Health (Scotland) Bill was read a second time.

Over-pressure in Elementary Schools.

In the House of Commons on the 13th inst., Mr. Talbot moved an address to the Crown praying that a larger proportion of the grant now given to public Elementary Schools should be allotted in the form of a fixed payment on average attendance. By this distribution of the grant he contended that over-pressure in elementary schools would be prevented. Mr. R. Paget seconded the motion, which was strongly opposed by Sir L. Playfair, who asserted that its effect would be to increase the remuneration of bad schools and to decrease the payments for good schools. After some remarks from Lord G. Hamilton, Mr. Forster, and Mr. J. A. Campbell, Mr. Mundella maintained that to secure good teaching there must be some testing of results, and this could only be done by individual examination. There was no new departure in the Code, and no Code had ever been so threshed out as this. It had received universal assent, and, whatever its defects, more thorough work was being done and better grants were being earned under it than under any previous code. In like manner, he contended payment by results had secured good teaching without interfering with freedom of action on the part of teachers and managers. He dwelt upon the large and increasing sums annually spent on education, and contended that State aid must be administered under State control. As to over-pressure the weight of evidence was, he stated, all the other way. On a division the motion was negatived by 117 to 53.

The Contagious Diseases Acts.

On the 14th inst., in reply to Mr. Bulwer, who asked the Secretary for War whether it was a fact that the number of soldiers serving at home admitted to hospital for venereal disease had during the past year largely increased and was still increasing, and whether he had any objection to lay upon the table of the House a return similar in form and detail to, and in continuation of, that presented to the House on the 3rd of March, 1884, showing the number of soldiers admitted to hospital for venereal disease since the end of the year 1883, Sir A. Hayter stated that there has been an increase of admissions to hospital for the cause referred to in the districts formerly protected from 110 per 1000 in 1883 to 135 per 1000 in 1884. The return in continuation of that presented in 1884 would be given if moved for.—Mr. Cavendish-Bentinck asked whether in the return about to be laid upon the table the War Office will distinguish between the various forms of venereal disease, so as to show the proportions in which the soldiers have been affected during the past year, and on this point Sir A. Hayter promised to make inquiry.

Medical Officer of Health for Cheltenham.

On Thursday, Mr. J. Campbell having asked the Secretary of the Local Government Board if he could state the result of his inquiries into the circumstances of the recent appointment of a medical officer of health by the Town Council of Cheltenham, Mr. G. W. E. Russell said he had obtained further particulars as to the appointment of Mr. Roch. It was true that when he was appointed he had a surgical qualification only. The regulations of the Board require that unless they dispense with the requirement, a medical officer of health shall possess both a medical and surgical qualification, and in the case of a borough such as Cheltenham they would not have consented to the office being held by a medical man with one qualification only; but Mr. Roch, about three weeks before the date when he was to enter upon his duties, obtained the requisite medical qualification. The Town Council, when this further qualification had been obtained, ratified the election by formally applying to the Board to dispense with the requirement referred to, so far as was necessary, in consequence of Mr. Roch not actually possessing at the time of the election the double qualification. The Board had complied with their request, and have sanctioned the appointment.

Obituary.

EDWARD WELLS, M.D. Oxon.

We *regret to have to record the death of Dr.* Wells of Reading, senior physician to the Royal Berkshire Hospital. Till three weeks ago Dr. Wells was fully engaged in the active duties of his profession, and it was hoped that a change to the Isle of Wight and rest from arduous duties would restore his broken health. He graduated at Oxford in 1840, and was Radcliffe travelling fellow of the University. After three years' professional study on the Continent he settled at Reading, in succession to the late Dr. Smith, father of the well-known Goldwin Smith. As physician to the Reading Hospital and Dispensary he was much beloved by the poor. Among his professional brethren he was highly esteemed, not in the town only but throughout Berkshire, and had accorded to him very rightly the honourable position of the principal consulting physician in the county. His education at Winchester and Oxford gave him many friends of position, but it was chiefly his gentle and pious nature which endeared him so much to his professional brethren and all who had the advantage of his acquaintance.

EDWARD DAVY, M.R.C.S.

On January 26th, the death occurred at Malmesbury, Australia, of Mr. Edward Davy, whose name has been recently before the public as the discoverer of the "relay" system, which had an important influence in the development of the electric telegraph. Born at Ottery St. Mary, Devon, in 1806, he studied at St. Bartholomew's Hospital, obtained the licence of the Society of Apothecaries in 1823, and became a Member of the Royal College of Surgeons in 1829. He then commenced the practice of his profession; and it was not until 1836 that he first experimented in electric telegraphy. Mr. Fahie's articles in the *Electrician* in July and August, 1883, and his "History of Electric Telegraphy," published by Spon (London) last year, do ample justice to Mr. Davy's early inventions and their importance in developing the practical use of electric telegraphy. In 1839 Mr. Davy emigrated to South Australia, going out in medical charge of an emigrant vessel. He contemplated pastoral pursuits, but soon abandoned the idea, and in 1843-45 was engaged as editor of the *Adelaide Examiner*. In 1848 he undertook the management of the Yatala smelting works. In 1852 he took charge of the Government Assay Office in Adelaide, and in 1853 he organised and took the management of a similar establishment in Melbourne. The Assay Department was at the end of the following year abolished, and Mr. Davy removed to Malmesbury, where the remainder of his life was spent. He took an active part in local affairs, was for many years a member of the borough council, was several times mayor, and was for more than twenty years an active justice of the peace.

GEORGE SANKEY, M.R.C.S., L.S.A.

We regret to record the death of Mr. George Sankey, one of the most honoured and respected members of the profession in Maidstone. Mr. Sankey had been in failing health for some months, and was advised to take a voyage to Australia to recruit his strength. He started from Gravesend in the *Chimborazo* on January 8th, and experienced very rough and cold weather, owing to which an attack of pneumonia demonstrated itself, and death resulted during the passage of the ship through the Red Sea.

Mr. Sankey received his medical education at St. Thomas's Hospital. He became a member of the Royal College of Surgeons and licentiate of the Apothecaries' Society in 1854. He was appointed senior surgeon of the Army Works Corps in the Crimea, and on his return to England settled in Maidstone, where he rapidly acquired a large practice. In 1870 he was appointed surgeon to the West Kent General Hospital, and after holding this important office for twelve years became consulting surgeon, which post he held till his death. His sterling integrity won for him a large circle of friends amongst his professional brethren and the general public.

Medical News.

Princess Christian, of Schleswig-Holstein, paid a visit on the 15th inst. to the London Hospital.

The fund raised up to the present time for the erection of a hospital at Port Said, as a national memorial to General Gordon, amounts to between £14,000 and £15,000.

North-Eastern Hospital for Children.—The Princess of Wales will open a bazaar on behalf of the funds of this hospital on June 24th next, at the Cannon-street Hotel.

Vaccination Grants.—Dr. Newham, of Winslow, (ninth time), and Dr. P. L. Benson, of the Buckingham Union, have received the Government grants for successful vaccination.

Mr. Francis Wicksteed, M.R.C.S., L.S.A., Consulting Surgeon to the Weston-super-Mare Hospital, has been elected by the ratepayers a Member of the Weston Local Board of Health.

Royal College of Surgeons.—The Library of this institution will be closed on Tuesday next, the 21st inst., owing to the large number of candidates who have entered their names for examination for the diploma of Membership of the College, amounting, we are informed, to 270.

The Water-supply of Lincoln.—An exhaustive report in reference to the water-supply of Lincoln has been presented to the corporation of the city by Dr. Harrison, the medical officer of health. The conclusions at which he arrives are:—(1) That the water, after filtration, as supplied, contains an excess of organic matter, making it only a second-class water. (2) That the sources of the water are polluted by drainage from land highly cultivated and occasionally manured with nightsoil; water from such a source is dangerous. (3) That the quantity available is not sufficient for the wants of the city. (4) That the filter-beds are capable of filtering more than a million gallons daily. (5) That it is not advisable to take the water from the River Witham for the supply of the city.

Large Bequests to Hospitals.—A bequest of £10,000 has been made to the Durham Infirmary by the late Mr. J. Eden, of Beamish-park, near Durham.—The late Captain Perry, of the Wergs Hall, has left £5000 to the Wolverhampton and Staffordshire General Hospital, and £250 to the Wolverhampton Eye Infirmary.

National Hospital for the Paralysed and Epileptic.—The Prince of Wales has consented to open the new building attached to this hospital during the month of June next. The new hospital, of which the west block forms a memorial to the late Duke of Albany, has been erected at a cost of nearly £80,000, of which all but a balance of £6500 is provided.

Sewage Works at Buxton.—On the 9th inst., the new sewage works, which have been recently erected at Buxton at a cost of about £4000, were formally opened. The works have been constructed for the purpose of treating the town sewage by precipitation with iron-water and lime, the iron-water being conveyed from a disused colliery at the foot of the Axe Edge hills.

Glasgow University Medico-Chirurgical Society.—At the annual business meeting of this Society, the following were elected office-bearers for next session:—Honorary President: Professor Leishman, M.D. President: John Macphail. Vice-Presidents: Senior, John H. Carslan, M.A.; Junior, Basil J. Adam. Secretaries: Corresponding, William H. Fergus; Minute, Henry J. Younger, M.A. Treasurer: Arthur D. Hughes. Librarian: William B. Leishman.

Seamen's Hospital Society.—At a recent quarterly court of the governors of this Society, the Committee reported that the drainage works, now being carried out for the purpose of placing the building in a sanitary condition, are progressing favourably, while the chapel is completed externally. To meet this expenditure the committee have been obliged to sell a further £2000 worth of stock, and contributions in aid of the special fund for drainage improvements and the chapel are urgently needed.

New Workhouse for the Holborn Union.—On the 14th inst., the foundation-stone of a new workhouse for the Holborn Union was laid by Mr. Garrod, chairman of the Board of Guardians. The building will accommodate 1000 able-bodied poor, and is to take the place of the recently demolished workhouse in the Farringdon-road, and the institution in Gray's-inn-road, which it is expected will in a short time be condemned. The new erection is situated near Tooting, and is estimated to cost £65,000, which will include the furnishing.

In Memoriam: Samuel Rabbeth.—A handsome brass tablet to the memory of the late Samuel Rabbeth, M.B., was on Saturday last placed by the Committee of Management in the inquest-room of the Royal Free Hospital. The tablet bears the following inscription:—"This tablet has been erected by the authorities of the Royal Free Hospital (Gray's-inn-road) and the medical staff to the memory of Samuel Rabbeth, M.B., M.R.C.S., senior resident medical officer of this hospital, who sacrificed his own life in the endeavour to save that of a little child, a patient under his care. Died October 20th, 1884; aged twenty-six years."

University of Oxford.—The Regius Professor of Medicine has given notice that Examinations for the degree of Bachelor of Medicine will commence in the Medical Department of the Museum as follows:—The second (or final) examination, Monday, June 8th, at 10 A.M.; the first (or scientific) examination, Friday, June 19th, at 10 A.M. Candidates for either of these examinations are requested to send in their names on or before May 23rd, to "the Regius Professor of Medicine, Medical Department, Museum, Oxford." Candidates for the Scientific Examination are to state whether they have passed the Preliminary Honour Examination in the School of Natural Science; and, if not, whether they desire to present themselves for Physics and Chemistry only at this examination, or for all the subjects thereof.

Devonshire Hospital and Buxton Bath Charity. At a meeting of the Committee of Management of this institution held on the 4th inst., it was stated that during the three months ending the 31st ult., 336 in-patients were admitted, or within two of the number admitted during the corresponding quarter of the previous year. The number of out-patients treated was twenty-two. The receipts were larger than in the corresponding quarter of last year, but it was found necessary to draw £500 from the reserve fund to defray the cost of the reconstruction and repairs of the inadequately completed works of the hospital extension.

Shocking Occurrence in a French Hospital.—On the 7th inst., one of the fever patients at the Tenon Hospital was suddenly seized with a fit of raving madness, and escaped on to the roof of the building, whence an attendant who had followed him endeavoured to compel him to return. A desperate struggle ensued, but the patient broke away and jumped to the ground, where he was afterwards found frightfully mutilated and inanimate. The attendant only saved himself from the same terrible fate by clinging with one hand to the stack-pipe until he was rescued by his companions.

Lunacy in Lancashire.—From a return just issued by the clerk to the Rainhill Asylum, it appears that there were on January 1st last 8178 pauper lunatics, idiots, and persons of unsound mind in Lancashire. Four classes of persons furnish very nearly one-fifth of the whole number of asylum inmates—viz., factory operatives 268, labourers 243, domestic servants 184, and housekeepers 456, making a total of 1151. The highest percentage of lunacy occurs in the Manchester Union, being 4·025 per 1000 of the population on the census of 1881; and the lowest occurs in Barrow, where it is ·740.

Infirmary Nurses and Medical Teaching.—A few months back, at the request of Dr. Neale, the Board of Guardians for the Wandsworth and Clapham Union voted a sum of money for the purchase of a skeleton and physiological diagrams, in order that the nurses of the infirmary might receive physiological instruction. On the 9th inst., at the close of the ordinary business of the board, Dr. Neale stated that he had given some twenty demonstrations to the nurses, who had attended well and taken an intelligent interest in the lessons. He had held a written examination, and both himself and Dr. Wilson were surprised at the proficiency shown by the pupils. The examination was a severe one, and both in that and practical work, such as bandaging &c., the nurses had made remarkable progress. Prizes were then presented to the four candidates who were most successful in the examination.

North-Western Association of Medical Officers of Health.—At the monthly meeting of the members of this Association, held on the 9th inst., a resolution was proposed by Dr. Vacher (hon. sec.), seconded by Dr. Kenyon (Chester), and carried, expressing regret that the medical officer of health of St. Pancras (Mr. Murphy) had felt himself compelled to resign his post "in consequence of the hostility of certain members of his vestry rendering it impossible for him to carry out his duties conscientiously and impartially," and asking for the intervention of the Local Government Board, to prevent the loss of this gentleman's services.—Dr. Hime then delivered his inaugural address, which was mainly devoted to the subject of cholera bacillus. He illustrated his remarks by mounted specimens of the bacillus placed under the microscope, and a short discussion followed.—A paper on "The Tenure of Office by Medical Officers of Health" was afterwards read by Mr. J. E. Phythian.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

Abbott, C. E., M.R.C.S.E., L.K.Q.C.P.I., has been reappointed Medical Officer of Health for the Braintree Rural Sanitary District.

Allott, James H. L., M.B., C.M.Ed., has been appointed House-Surgeon to the Dewsbury and District General Infirmary, Dewsbury.

Ashe, Wm. Conyngham, L.R.C.S.I., has been appointed Medical Officer to the Newcastle Hospital, New South Wales.

Battin, John, L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Medical Officer for the Church Eaton District of the Cannock Union, vice Baddeley, resigned.

Brown, Jas. Wm. H., L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the West District of the Holbeck Union, vice Dobson, deceased.

Clifford, William, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Adare Dispensary, vice Shanahan, resigned.

Cooper, Arthur, M.R.C.S., has been appointed Surgeon to the Westminster General Dispensary, vice Barron, resigned.

Forbes, Armitage, L.R.C.P.Ed., L.R.C.S.I., has been appointed Government Medical Officer and Public Vaccinator for the Tweed River District, New South Wales.

Hawkins, Francis Henry, M.B.Ed., &c., has been appointed Assistant Physician and Registrar to the Hospital for Epilepsy and Paralysis, Portland-terrace, Regent's-park.

Heath, James, M.B.Ed., has been appointed Senior House-Surgeon to the Torquay Hospital, Torquay, vice Thistle, resigned.

Murray, Chas. Stormont, F.R.C.S.I., L.S.A.Lond., has been appointed Administrator of Anæsthetics, Samaritan Free Hospital.

O'Reilly, Walter W. Joseph, M.D., M.Ch.Dub., M.R.C.S., has been appointed Honorary Physician to the Sydney Hospital.

Wardle, Mark Anthony, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer for the Bishop Auckland District and Workhouse, Auckland Union, vice Hutchinson, deceased.

Whitton, Thos. Bain, M.D., L.R.C.S.Ed., has been appointed Surgeon to the Reefton Hospital, New Zealand.

Yarrow, Geo. Eugene, M.D.Heid., M.R.C.P.L., M.R.C.S., has been appointed Medical Officer for St. Luke's Parish, Holborn Union.

Births, Marriages, and Deaths.

BIRTHS.

Brewer.—On the 11th inst., at "Cairn," Richmond-road, E., the wife of A. H. Brewer, L.R.C.P.L., &c., of a daughter.

Duke.—On the 10th inst., at Locksley, Freshwater, Isle of Wight, the wife of Edgar Duke, M.R.C.S.Eng., L.S.A.Lond., of a daughter.

Duncan.—On the 11th inst., at 6, Harley-street, Cavendish-square, W., the wife of William A. Duncan, M.D., F.R.C.S.Eng., of a daughter.

Finlay.—On the 1st inst., at Montagu-street, Portman-square, W., the wife of David W. Finlay, M.D., M.R.C.P., of a daughter.

Pearce.—On the 8th inst., at The Manor House, Brixton-rise, S.W., the wife of Chaning Pearce, M.D., of a son.

Powell.—On the 10th inst., the wife of R. Douglas Powell, M.D., F.R.C.P., of a son.

Uhthoff.—On the 7th inst., at Western-road, Hove, Brighton, the wife of John Caldwell Uhthoff, M.D., of a daughter.

MARRIAGES.

Bruce—Collingridge.—On the 8th inst., at St. Mary's, Hornsey, by the Rev. F. H. Dalby, M.A., brother-in-law of the bridegroom, assisted by the Rev. J. Jeakes, M.A., Rector of the Parish, Robert Bruce, M.R.C.S., of the City-road, E.C., to Emma, the second daughter of William Hill Collingridge, of Hornsey, N.

Deane—Planck.—On the 2nd ult., at Holy Trinity Church, Allahabad, India, by the Rev. A. O. Hardy, M.A., Andrew Deane, M.D., F.R.C.S.I., Surgeon-Major Bengal Medical Service, Civil Surgeon, Cawnpore, N.W.P., to Lilian Annie, only daughter of Chas. Planck, F.R.C.S.E., Deputy Surgeon-General Bengal Medical Service, Sanitary Commissioner and Inspector-General of Vaccination, North-west Provinces and Oudh.

Humphreys—Spottiswoode.—On the 8th inst., at St. Mary's, Oatlands, Francis Rowland Humphreys, L.R.C.P., &c., of Queen's-crescent, Haverstock-hill, to Cecilia Mainie Spottiswoode, youngest daughter of the late Major-General Spottiswoode, 37th B.N.I.

Penny — Tait. — On the 7th inst., at St. Mark's, Tollington-park, Dr. Charles Hall Penny, of Enfield, to Emily Mary, daughter of the late Greville Ewing Tait, M.R.C.S., and granddaughter of the late Rev. A. S. Acheson, Rector of Teigh, Oakham.

Plucker — Kirkpatrick. — On the 7th inst., at the Church of the Resurrection, Brussels, Theodore Plucker, M.D., Professor of the University of Liège, to Mary Eliza Caroline, eldest daughter of W. H. Kirkpatrick.

Storry—Scott.—On the 8th inst., at St. Thomas's, Haverfordwest, by the Rev. G. C. Hilbers, assisted by the Rev. J. Popkin Morgan, cousin of the bride, Frederick William Storry, M.R.C.S., of Stroud, Gloucestershire, eldest son of Edwin Storry, of Howden, Yorkshire, to Beatrice Eliza, second daughter of the Rev. William Scott, Vicar of Slebech and Minwere, and late Head Master of Haverfordwest Grammar School.

Tirard—Beloe.—On the 8th inst., at Holton St. Peter, by the Rev. Henry Ryder Ware, uncle of the bride, Nestor Isidore Charles Tirard, M.D.Lond., Professor of Materia Medica, King's Coll., Lond., to Helen Mary, second daughter of the Rev. Robert Seppings Beloe, Rector of Holton St. Peter, Suffolk.

DEATHS.

Smith.—On the 12th inst., at Greenhill, Weymouth, William Johnson Smith, M.D., aged 72.

Tibbits.—On the 14th inst., at Bradford, Yorkshire, E. T. Tibbits, M.D., London, fourth son of Thomas Tibbits, 29, Burlington-road, Clifton, aged 45.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

Appleton & Co., New York.
The Story of My Life. By J. Marion Sims, M.D., LL.D. Edited by his Son, Dr. H. Marion Sims. pp. 471.
A Manual of Dermatology. By A. R. Robinson, M.B., &c. pp. 647, with 83 Illustrations.

Baillière et Fils, Paris.
Nouveau Dictionnaire de Médecine et de la Chirurgie Pratiques. Tomes xxxvi., xxxvii. pp. 847—907.
Leçons Cliniques sur les Maladies des Voies Urinaires. Par Prof. Félix Guyon. Deuxième Edition, revuée et augmentée. pp. 1034, avec 49 Figures.

Baillière, Tindall, & Cox, London.
On Bronchial Asthma (Lettsomian Lectures.) By J. C. Thorowgood, M.D. Second Edition. pp. 91.
The Student's Guide to the Medical Profession. By C. B. Keetley, F.R.C.S. Second Edition. Edited by the Author and Robt. Wharry, M.D. pp. 122.

Blakiston, Son, & Co., Philadelphia.
Transactions of the American Surgical Association. Edited by J. Ewing Mears, M.D. Vol. II. pp. 531, with Illustrations.

Churchill, J. & A., London.
The Student's Guide to Clinical Medicine and Case-taking. By Francis Warner, M.D.Lond., F.R.C.P. Second Edition. pp. 211.
The Pharmacopœias of Twenty-five of the London Hospitals. By Peter Squire. Fifth Edition, revised by P. W. Squire and A. H. Squire. pp. 317.
Operative Surgery in the Calcutta Medical College Hospital. By Kenneth M'Leod, A.M., M.D., F.R.C.S.E. pp. 351, with Plates.
Endemic Goitre or Thyreocele. By Wm. Robinson, M.D., M.S. pp. 66.

Hamilton, Adams, & Co., London.
Lateral Curvature of the Spine. By Wm. J. Tivy, F.R.C.P. Ed. pp. 72.

Hirschwald, A., Berlin.
Klinische Beiträge zur Kenntniss der Aktinimykose des Menschen. Von Dr. J. Israel. S. 152.

Kegan Paul, Trench, & Co., London.
The Common Sense of the Exact Sciences. By the late W. Kingdon Clifford. pp. 271, with 100 Illustrations.

Lea Brothers & Co., Philadelphia.
Lectures on Diseases of the Nervous System, especially in Women. By S. Weir Mitchell, M.D. Second Edition, Revised and Enlarged. pp. 287, with 5 Plates.

Longmans, Green, & Co., London.
Transactions of the National Association for the Promotion of Social Science. Birmingham Meeting, 1884. pp. 783.
Transactions of the Obstetrical Society of London. Vol. xxvi. pp. 375, with Illustrations.
Civilisation and Progress; being the Outlines of a New System of Political, Religious, and Social Philosophy. By J. Beattie Crozier. pp. 453.

London Literary Society.
Darius the Median identified, or the true Chronology of the Ancient Monarchies recovered. By Charles Fulkes Watson. pp. 219.

Putnam's Sons, New York & London.
The Social History of the Eighth International Medical Congress. By D. B. Delavan, M.D. Second Edition. pp. 36.

Smith, Elder, & Co., London.
A Practical Treatise on Fractures and Dislocations. By Frank Hastings Hamilton, M.D., LL.D. Seventh American Edition. pp. 1005, with 379 Woodcuts.

Ullastres, Evaristo, Barcelona.
Tratado Iconografico de las Enfermedades Externas del Organo de la Visión. Por el Dr. Juan Gelpí y Jofre. Contiene 20 láminas con 103 oleografias.

Help at Hand; by Countess Cowper.—Deutsches Archiv für Geschichte der Medicin und Medicinische Geographie VIII.; herausgegeben von H. Rohlfs. (Hirschfeld, Leipzig.)—De las Fiebres de Borras ó Calenturas Malas de las Antillas; dor el Dr. A. W. Reyes.—Typhoid Fever in the Young; by A. Jacobi, M.D.—The Spinal Arthropathies; by A. Sydney Roberts, M.D.—Du Traitement Rationnel de l'Affection Furonculeuse; par le Dr. Gingeot.—Etudes Thérapeutiques sur l'Antipyrine; par Henri Huchard. (Doin, Paris.)—Die Thatsuchen der Vererbung in Geschichtlich-Kritischer Darstellung; von Dr. Emanuel Roth. (Hirschwald, Berlin.)—Vorwort und Einleitung zum Bericht über die Allgemeine deutsche Ausstellung auf dem Gebiete der Hygiene und des Rettungswesens unter dem Protectorate I. M. der Kaiserin und Königen; herausgegeben von Dr. Paul Boerner.—Indexes of Patents and Patentees in Victoria, Vols. XIII. & XIV.—Beiträge zur Kenntniss der Micrococcencolonien in den Blutgefässen bei Septischen Erkrankungen; von Dr. J. Ziemacki.—Sanitary Inspection of Houses and Premises. Illinois State Sanitary Survey.—Force v. Work; by Wm. Pepper, M.D.—Die Spaltzpilze; Die Pilzthiere oder Schleimpilze; von Dr. W. Zopf. (Trewendt, Breslau.)—Zur Theorie der Heilwirkung des Franzensbader Moores; von Dr. C. Reinl.—Man: Whence and Whither? by H. J. Hardwicke, M.D.—Unusual Cases of Vesico-vaginal and Vesico-uterine Fistula: The Use and Abuse of Battey's and Tait's Operations; by W. H. Baker, M.D. (Boston, Stanley and Usher.)—Aneurysms of the Aorta; by Oswald Browne, M.B.

Medical Diary for the ensuing Week.

Monday, April 20.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 P.M., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 P.M., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 P.M., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Medical Society of London.—8.30 P.M. Mr. Mitchell Banks: On the Treatment of Gangrenous Intestine in Strangulated Hernia, with a successful case of Resection of the Small Bowel.—Dr. Herbert Snow: On the Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri.

Tuesday, April 21.

Guy's Hospital.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

St. Thomas's Hospital.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

Cancer Hospital, Brompton.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

Westminster Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 2.30 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Royal Institution.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

Pathological Society of London.—8.30 P.M. Mr. Lane: Three cases of Displacement of the Lumbar Vertebræ.—Dr. Turner: (1) Tumours in Adrenals (card); (2) Suppuration of Simple Fracture of the Hyoid Bone (card).—Dr. Goodhart, for Dr. Handfield Jones: The Cerebral Arteries in states of Congestion.—Dr. Willcocks: A case of Hypospadias.—Dr. Percy Kidd: Destructive Disease of the Lung.—Dr. Allchin: Acute Ulceration of the Colon.—Dr. Silcock: Entero-colitis (card).—Dr. Goodhart: Specimens of Enteritis and Colitis (card).—Mr. Battle: Cyst growing from the Wall of the Intestine.—Mr. J. Hutchinson, jun.: Hydrocele of the Cord.—Mr. Bruce Clarke: Two cases of Gastrostomy.—Dr. Hebb: Aortic Valvulitis, with Embolism of a Coronary Artery and Middle Cerebral (card).—Mr. Shattock: Fracture of the Superior Cornua of the Thyroid Cartilage (card).—Dr. Chaffey: Solitary Kidney (congenital) (card).—Dr. Hale White: (1) Enormous Hypertrophy of the Heart (card); (2) Large Triple Phosphate Renal Calculus (card).—Dr. Pitt: (1) Sarcoma of Petrous Bone, Cerebellum, and Naso-pharynx (card); (2) Syphilitic Ulceration of Larynx and Trachea (card).—Dr. Hadden: (1) Broad Ligament Cyst containing Coagulated Albumen (card); (2) Ulceration of Intestine originating in Hæmorrhage (card).

Wednesday, April 22.

National Orthopædic Hospital.—Operations, 10 A.M.

Middlesex Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

St. Mary's Hospital.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.

London Hospital.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 P.M.

University College Hospital.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

Royal Free Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 3 to 4 P.M.

Royal Microscopical Society.—8 P.M. Conversazione.

British Gynæcological Society.—8.30 P.M. Specimens will be shown by Dr. More Madden (Dublin), Mr. Reeves, and Dr. Fancourt Barnes.—Dr. More Madden: On some Points in the Treatment of Fibro-myomata.—Dr. Chalmers: Gangrene of the Vulva.

Thursday, April 23.

St. George's Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

North-West London Hospital.—Operations, 2.30 P.M.

Royal Institution.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

The Parkes Museum of Hygiene.—8 P.M. Sir Spencer Wells, Bart.: Cremation.

Friday, April 24.

St. George's Hospital.—Ophthalmic Operations, 1.30 P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 2 P.M.

Quekett Microscopical Club.—8 P.M. Papers by Dr. Burch and Mr. F. Cheshire.

Clinical Society of London.—8.30 P.M. Dr. Sidney Phillips: A case of Sporadic Cretinism.—Mr. Walsham: Ligature of the External Iliac Artery, with two Kangaroo-tail Ligatures and Division of the Artery between them, suppuration of the sac, ultimate recovery.—Dr. Dickinson and Mr. Rouse: A case of Renal Lithotomy.—Dr. Hadden: A case of Obstruction of Arteries and Veins extending over many years.—Mr. J. R. Lunn: Four cases of Osteitis Deformans (living specimens).—Mr. R. W. Parker: A case of Thyrotomy with Preservation of Voice (living specimen).—Dr. Stephen Mackenzie: (1) A case of Osteitis Deformans; (2) A case of Hereditary Multiple Tumours (living specimens).

Royal Institution.—9 P.M. Mr. W. Carruthers: British Fossil Cycads.

Saturday, April 25.

King's College Hospital.—Operations, 1 P.M.

Royal Free Hospital.—Operations, 2 P.M.

Royal Institution.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 16th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 10	29·55	N.W.	42	40	...	45	40	·02	Raining
„ 11	29·64	N.E.	43	41	80	51	41	·07	Cloudy
„ 12	29·85	E.	45	42	89	56	40	...	Cloudy
„ 13	29·97	N.E.	41	40	70	51	39	...	Overcast
„ 14	29·92	E.	41	40	78	51	38	...	Cloudy
„ 15	29·90	E.	43	40	88	55	40	...	Overcast
„ 16	29·73	E.	44	44	...	...	43	·70	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

WAR WITH NATURE.

AT the commencement of the war in the Soudan we called attention to the uselessness of a contemplated occupation of the Soudan by Europeans. In the House of Commons on Monday, the 13th, Lord Randolph Churchill repeated this fact, stating that from a personal visit he had gathered that our troops were suffering terribly from the effects of the climate. This will prove *our* conqueror, even if we should succeed in "smashing the Mahdi."

Publicity.—The discreditable practice is one with which the corporations alone can effectually deal.

"OVERWORK IN TELEGRAPH OFFICES."

To the Editor of THE LANCET.

SIR,—I read with interest an annotation under the above heading in your issue of the 28th ult.

A few days before the late Postmaster-General expired I had written to him stating the case of my daughter, who was in the service in a provincial city, and drawing his attention to the hours of labour at that office—9 A.M. to 5 P.M. or 10 A.M. to 6 P.M., with only an uncertain fifteen minutes between those hours for lavatory and a scrap refreshment, and in the twelve months a fortnight's holiday. She was admitted into the service after receiving a medical certificate of good health. Mental strain to excel in the various complicated systems continuously cropping up in the service often caused complainings of debility. To have gone on sick-leave meant half salary, with no private resources to fall back upon; so she continued at work till ultimately she broke down, and for weeks lay between life and death. She is still in the service, but suffers much from impaired health and broken constitution. Some initiatory step was the result of my letter to Mr. Fawcett, and inquiries were at once instituted in the office at which my daughter was employed. I did not hear officially on the matter, and suppose the sudden death of the Postmaster-General broke the thread of my appeal for amelioration of the rule in that office—fifteen minutes for hasty refreshment and half salary when stricken down, or when rest is deemed a necessity to put off a total breakdown. I am, Sir, yours obediently,

FATHER.

April 4th, 1885.

"CONSCIENCE MONEY."

To the Editor of THE LANCET.

SIR,—The following is probably a rare, if not a unique, experience in these hard times. My partner amongst his letters found an envelope with a five-pound note enclosed in a sheet of writing-paper, on which was written, "Conscience Money." There were some initials in the corner of the paper, but they were so minute that they could not be deciphered even under a "high power."

I am, Sir, yours truly,

Fyfield, near Andover, April 11th, 1885. W. J. H. LUSH, M.D.

PUBLIC GARDENS AND PLANTATIONS OF JAMAICA.

THE annual report of the public gardens and plantations for the year 1884 has just been issued by Mr. Morris, the director of these plantations. It contains much valuable information, and shows the state of the experimental cinchona plantations carried on by Government for the purpose of the scientific culture of different species of cinchona and for supplying seeds, seedlings, and plants to private planters. As regards the present position of cinchona cultivation, the market would appear to be in a very depressed state, and the prospects of the cinchona planter not of a very encouraging character. It should be remembered, however, that the whole history of the quinine market is one of numerous fluctuations.

Qualified Assistant.—There are legal points to be considered by the practitioner, though they are more or less at the discretion of the presiding judge, who might see fit to dispense with the presence of the qualified assistant as a witness.

P. W. M.—The paper is marked for early insertion.

"AN EL DORADO FOR MEDICAL MEN."

To the Editor of THE LANCET.

SIR,—We of the profession here derived considerable amusement from the perusal of the sensational annotation with the above heading, which appeared in your issue of Jan. 24th. But in case the brilliant and dazzling array of fees therein contained should tempt some rash and adventurous spirits to plunge into the unknown wilds of the Argentine Republic in search of patients, practice, and *pesos* (dollars), perhaps you will allow me to correct some of these figures and to sound a slight note of warning. The only correct figures are 8*s.* for a consultation at the doctor's house, 16*s.* for a visit to the patient's house, and £20 for a confinement without operations (midwifery fees are high, because midwives are universally employed, and but a small proportion of cases are attended by doctors). The other tremendous fees tabulated I happen to know were actually paid, but it was in solitary and particular cases only.

An item also much exaggerated is that of £20 and upwards for consultation, the consultation fee fixed by law being £4 for each doctor at each consultation. As the people here are more nervous and apprehensive, consultations are much more indulged in than at home. In fact, the ordinary routine work of the general practitioner is so badly paid for that without consultation it would be difficult for the doctor to make both ends meet. The man who is thoroughly appreciated here and whose work is always well paid, is the skilled operating surgeon; £100 would be an ordinary tracheotomy fee, and £150 or £200 the fee for excision of the breast. Eye specialists also command good practice and good fees.

Per contra, we have the expense of living, which is very high in this city. A small house in the centre will cost from £250 to £300 per annum, and a couple of servants another £100; food is cheap, but everything else extremely dear. Again, there is a large and flourishing medical school here which turns out some forty or fifty medical men every year, and, although the native doctors are uniformly most courteous and tolerant, still they invariably call in their own set to consultations, except the family insist on the presence of a foreign doctor. Besides this, a thorough knowledge of Spanish is necessary before starting, and the candidate must have a university degree, M.B. or M.D., as the Faculty here will not accept the ordinary double qualification; diplomas must also be revised by the Argentine Consul in London before you come out.

Fulfilling all these conditions, and with a good medical education to fall back upon, a steady English gentleman will find here a hearty welcome, a hospitable land, and a warm-hearted and generous people. But let him beware of the thousand pound gentlemen, and let him be cautious about taking gratuitous advice from even such a highly respectable journal as the *South American Journal*. Apologising for this lengthy communication, I remain, Sir, yours very truly,

VERITAS.

Buenos Ayres, Feb. 23th, 1885.

M.B.—If a police-surgeon is called to attend a prisoner at the instance of the police, he is clearly justified in demanding the usual fee. If his advice is sought at the instance of the prisoner, he has no legal claim against the authorities. It behoves a medical man to satisfy himself of the facts before rendering professional aid to a person in charge of the police.

IRON HOUSES.

To the Editor of THE LANCET.

SIR,—I should be obliged if any of your readers could give me any definite information with regard to iron houses from a hygienic point of view. The advantages are obvious; durability, economy, rapidity of erection, and portability, if I may use such a term concerning what is commonly considered a fixture, it being understood that the houses meant are of the cottage or bungalow type and of small size. Theoretically, of course, a residence with iron shell is not healthy, being hotter in summer and colder in winter than brick or stone; *per contra*, no damp or wind can penetrate. Again, are there means of avoiding the extremes of temperature induced by the non-conductor, such as felt or wood lining, or coating of composition, or the like? Many such additions are recommended by builders, but are they really trustworthy? Some practical hints from men who have lived in these houses will be useful to myself, and probably others. I am, Sir, yours faithfully,

COUNT.

April 7th, 1885.

PROFESSIONAL EDUCATION IN CUBA.

THE condition of science and education generally in Cuba is, according to the *Eco Cientifico de Las Villas*, most flourishing. All the faculties exist in the University, and studies can be carried on there in all branches up to the degree of Doctor. Each province has an institution for secondary education. The clinical and obstetrical departments of the hospitals are most satisfactory, and there are numerous practitioners of ability. Surgery has of late made rapid strides, all the most serious operations being now skilfully performed on the island. There are also numerous scientific and professional societies in a flourishing state.

A. K. C.—1. The charges appear perfectly reasonable.—2. Whether the result is to be regarded as quite satisfactory is a question which must depend upon the whole of the circumstances of the case, and these are not given.

THE BRUSSELS DEGREE.

To the Editor of THE LANCET.

SIR,—The M.D. degree is now so frequently sought by British practitioners, owing to the close regulations in regard to residence in force at our English and Scotch universities, that I am induced to give a short account of the last examination.

As is generally known, English medical men have the privilege, on presentation of their diplomas, of taking the three "Doctorates" at once, instead of at a year's interval between each. Candidates must be prepared to spend a fortnight, or even more, from the Saturday specified, in Brussels, although sometimes ten days are sufficient. The time may be shortened by deferring arrival until Monday or Tuesday, if special leave be obtained. There were sixteen candidates on the last occasion, all English. Of these, five were rejected at the first Doctorate, and one each at the second and third; so that nine, or little more than one-half, passed for the complete degree. This is about the usual average of late years. Probably two-thirds of the candidates were recently qualified; the rest had been in practice for some years.

The examination is entirely *vivâ voce*, unless by special arrangement. All the candidates are usually present in the room, although four only are taken on one evening. A little knowledge of French is helpful, although an interpreter is provided.

The First Doctorate is by far the hardest of the three, and will, in my judgment, for thoroughness and fairness compare well with most English examinations. Medicine, Therapeutics, Pathology, and Mental Diseases each occupy a quarter of an hour. As a rule, a subject—e.g., Pleuro-pneumonia, Dysentery, "Chronic Myelitis," Cancer of the Stomach, &c.—is taken, and the candidate is kept on that subject during the time specified, unless he shows marked ignorance, when a second subject is given him. One is expected to expound in detail the symptoms and course of the disease, "as if you were giving a lecture," and the causes for the various phenomena. "Go on," "And then?" and "Why?" are repeated at frequent intervals.

In Therapeutics also the test is a thorough one. The examiner, who is very gentlemanly in his manner, expects a full knowledge of the physiological action of the better known drugs, is especially particular as to the *modus operandi* of purgatives, diuretics, &c.; he is also well acquainted with recent discoveries and views, and asks often the properties of drugs which are only to be found in our most recent text-books, such as cocaine, nitro-glycerine, &c. Such a work as Mitchell Bruce's Materia Medica (Cassell) is, however, quite sufficient.

Pathology is the rock on which most make shipwreck at the First Doctorate. It is no secret that this examiner is the terror of candidates, partly because of the minute knowledge of morbid anatomy and of microscopic work he requires, and partly because of his manner of examining. Mere cramming of the subject is quite useless. Such a book as Green's Pathology must be studied repeatedly, until the various morbid appearances are graphically present to the mind's eye of the candidate, and he must not be put to confusion by rapid cross-questioning and frowning looks. Parasites form also a favourite topic.

Mental Diseases are but lightly treated. The examiner for this subject asks also on general medical science, methods of diagnosis, &c. On the whole, the First Doctorate is a fair, though rather difficult, test, at which many men fail on their first attempt.

The Second Doctorate embraces Surgery, Medical Jurisprudence, Midwifery, and Hygiene. The first of these is not generally difficult; it is, however, unequal. There is little or no surgical pathology; general and regional surgery must be familiar to the candidate. Midwifery is thoroughly, and rather scientifically, entered into. Besides one of our best text-books, some acquaintance with a French manual would be helpful. Such questions as the different kinds of fœtal movements, external and internal ballottement, &c., are required in some detail, and the variations in the fœtal pulse according to sex is a favourite point. For Medical Jurisprudence and Hygiene it is almost impossible to prepare. A general acquaintance with these subjects is undoubtedly required; but the questions asked must be answered by common sense. Cremation, the general effects of climate in their widest sense, the effects of wind on soil, the period of incapacity for work after injury, &c., are not subjects to be found in English text-books, and, as a fact, common sense and a little medical experience suffice to answer the questions.

The Third Doctorate is entirely practical. Clinical Surgery is under M. De Roubaix, Surgeon to the King, a veteran whose eye and hand are quick and steady as ever in his art. He practises antiseptics in a modified form. Both in Surgery and Medicine cases have to be examined in the hospitals, two in each subject. There is no difficulty in this to men accustomed to practise. Little of the minuter methods of diagnosis is required. Operative Surgery is rather hard. Three operations have to be performed: one ligature of artery, such as the radial, femoral, or lingual; one amputation of finger, or a Chopart, &c.; and, lastly, catheterism, castration, resection of middle third of clavicle or of part of a rib. Dissections are also required; and here a pretty accurate knowledge of the regions is needful—the cutaneous nerves, order of tendons, especially the lymphatic glands and vessels, also cranial nerves, &c. The severity of the recent anatomical test was unlooked for by most of the candidates. Practical Midwifery with the mannequin is fairly carried out. Some ordinary facility in operations is required.

Thus it will be seen that a fair all-round test is applied. At the same time it is the Medicine and Pathology examiners who reject the men. Those who pass MM. Crocq and Wehenkel will most often somehow get through the remaining Doctorates. Many men go over to Brussels with little idea of what they will find; and I heard bitter complaints from some who had put faith in advertisements which had appeared in England.

I hope the day is not distant when one or more of our own universities will give to English students an examination something like this. Let it aim at a high standard in all branches, let the fee be a substantial one, but let it not require that one condition which to the busy practitioner is unattainable—residence. Is it no loss to the British Universities (if they be deaf to any higher motive) that so large a number of our own men, and men not slothful or ignorant of their profession, should be driven to spend their money for a foreign degree?

I am, Sir, yours faithfully,

Finsbury-circus, April 4th, 1885. HINGSTON FOX.

*** We are frequently asked about the examination for the degree of Brussels. The above letter will supply the information desired. It cannot be considered that the ordeal quite realises that which an examination for a degree should be. There is no examination in Arts; none in Anatomy and Physiology proper. There is no written examination, and no thesis. Even in Medicine, which seems to be the subject in which the examination is most severe, it appears to be by no means exacting.—ED. L.

Virtus vincit invidiam.—Our correspondent is thanked for his letter; but we think it would be better to postpone any remarks on the subject for a short time, till we see what steps are taken to remedy the grievance.

Dr. Horace Swete's (Worcester) letter will appear next week.

"IMPROVED FRACTURE BOX."

To the Editor of THE LANCET.

SIR,—In your issue of the 11th inst. a special form of splint is described by Mr. Foley, Medical Officer for Midleton Hospital, as a new invention. Permit me to state that I have used a splint similar to his for two years, but with an addition, which I consider important—viz., the use of plaster straps, attached to the fractured limb, and to the end of the splints, to act as a counter-extension, extension being made by plasters, below the seat of fracture, and attached to a ratchet at the lower end of the splints. The apparatus is simply box splints, with the addition of plasters and a ratchet for extension. In shape my apparatus is similar to Mr. Foley's, without having perforations in the pieces, which is an improvement. My idea was to have a box splint, able to keep up extension and counter-extension, in oblique fractures of the leg, and for compound fractures. At the time I carried out my ideas I mentioned the fact to Professor Chiene of Edinburgh, who may, however, have forgotten about the matter.

I am, Sir, yours faithfully,

Fife, April 13th, 1885. T. GOODALL NASMYTH, M.B., C.M.

THE BIRTH-RATE OF ILLEGITIMATES IN PRAGUE.

AMONG 7031 births in Prague there are 3762 legitimate and 3329 illegitimate. It is a noteworthy fact that the death-rate among the illegitimate does not greatly exceed that which prevails among the legitimate.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Allow me to point out a slight clerical error in my letter of the 4th inst. As it stands in your issue of the 11th inst. I am made to say that the Lieut.-Governor of Guernsey, the bailiff of Guernsey, the chief constable of Guernsey, *and* Dr. Le Page *each* received a copy of the *Journal*. The clause should run:—"and the following officials: the *Lieut.-Governor of Guernsey*, the bailiff of Guernsey, the chief constable of Guernsey. Dr. Le Page received a copy of the *Journal*." I am anxious to prevent any possible misunderstanding on this point.

I am, Sir, your obedient servant,

Guernsey, April 13th, 1885. J. AIKMAN.

DISINFECTING CHAMBERS.

To the Editor of THE LANCET.

SIR,—I shall be glad if any of your readers will be good enough to inform me which are the best disinfecting chambers now in use and where to be seen. I am, Sir, yours faithfully,

April 11th, 1885. MEDICAL OFFICER OF HEALTH.

HAMILTON COUNTY, KANSAS.

A CORRESPONDENT at Aubery, Hamilton County, Kansas, writes to us pointing out the advantages which the county affords as a place of residence for dipsomaniacs who are wishful to get rid of their craving. It is against the law of Kansas to sell, or for the railways to carry, any intoxicating liquor, of which, our correspondent states, there is not a pailful in the county. Land is cheap, and there are many methods of employing capital, in the raising of stock, &c.

Haslingden.—We have no further information on the subject.

Mars.—The question was answered in our issue of March 21st, p. 547.

A WARNING.

To the Editor of THE LANCET.

SIR,—I learn that an impostor is going about the country bearing a *card and recommendation from me. He has victimised* members of the profession by representing himself as a doctor's son. Let me warn your readers against anyone showing a card in the name of

Southborough, April 13th, 1885. E. PAGET THURSTAN, M.D.Cantab.

To the Editor of THE LANCET.

SIR,—I should like to warn my professional brethren against an impostor who says he is the son of an Indian surgeon. He is about 5 ft. 8 in., thin, with light-brown hair and mutton-chop whiskers. He professes great piety, and cannot get a situation as photographic operator as he refuses to work on Sunday. I unfortunately *gave him a frock-coat and some blue and white shirts with turn-down* collars, and entrusted him with some money, which he stole, together with an overcoat which he begged another person to lend him. He imposed on me by means of a visiting-card of Dr. Thurstan, who knows nothing of him. I am, Sir, yours truly,

Woolwich, April 14th, 1885. T. MAXWELL.

THE PARASITIC NATURE OF MELANOSIS.

To the Editor of THE LANCET.

SIR,—A reference to the "Medical Digest," Section 1670 : 3, will show that in your pages in 1867 the experiments of M. Gorgon upon the inoculability of melanosis were commented upon. Since that time, until your note upon M. Bard's discovery in THE LANCET of April 4th, p. 633, no observations upon the subject have caught my attention.

I am, Sir, yours obediently,

South Hampstead, April 4th, 1885. RICHARD NEALE, M.D.Lond.

GLYCERINUM ACIDI CARBOLICI IN DIABETES MELLITUS.

To the Editor of THE LANCET.

SIR,—A patient of mine suffering from diabetes mellitus in which the thirst was very excessive, I tried every known remedy to alleviate it without effect. I ordered glycerinum acidi carbolici in five-minim doses, and it relieved the patient at once. At present he is in good health, the urine being almost free from sugar.—Yours faithfully,

Rathfriland, March 31st, 1885. J. MCAVOY, M.D.

"AN OLD MEDAL."

To the Editor of THE LANCET.

SIR,—Is it not probable that the medal referred to by your correspondent, "M. U.," was struck previously to the enclosure of the gardens, which, to avoid inconvenience, was postponed until a sufficient number were circulated? I am, Sir, yours faithfully,

April 14th, 1885. M.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Surgeon-General Stewart; Mr. Henry Lee, London; Mr. Reginald Harrison, Liverpool; Dr. Geo. Oliver, Harrogate; Dr. Eben. Watson, Glasgow; Dr. Farquharson, London; Dr. Taylor, Anerley; Messrs. Cassell and Co., London; Mr. Blok, London; Mr. Brown, Cardiff; Dr. Joseph Bagdanik, Biala; Mr. E. Shoesmith, Rochdale; Mr. Radley, London; Mr. J. G. Thomson; Mr. Rawlings, London; Mr. Carmalt Jones, London; Mr. Mumford; Dr. H. Swete, Worcester; Mr. Wale, Maidstone; Mr. T. G. Nasmyth, Foulford; Dr. Thurstan, Southborough; Mr. Blackett, London; Mr. Aikman, Guernsey; Mr. J. W. Beck, London; Mr. A. J. Cook, London; Mr. A. G. Auld, Wick; Mr. W. C. Steele, London; Mr. J. N. Cook, London; Mr. H. B. Hewetson, Leeds; Mr. W. G. Lacy, London; Dr. Casey, New Windsor; Mr. C. Morris, Chester-le-Street; Mr. Drew, Wellington, N.Z.; Dr. Acland, Oxford; Dr. Sinclair, Dundee; Mr. N. C. Dobson, Clifton; Dr. Brett, Watford; Dr. Althaus, London; Deputy Surgeon-General Fowler, Bedford; Mr. Berdoe, London; Mr. Haggard; Mr. C. N. Williamson, London; Mr. Hutchinson; Mrs. Bourchier, Sheffield; Mr. Edwards, Chester; Mr. Cardew, Teignmouth; Messrs. Brown, Davis, and Co., Glasgow; Dr. S. C. Griffith, London; Mr. Maythorn, Biggleswade; Mr. Hulme, Birmingham; Mr. Selwood, Winchester; Dr. Weaver, *Southport; Mr. Spitzty, Canonbury; Messrs. Norman and Co.*, Cheltenham; Mr. Twyford, Hanley; Mr. Bigg, London; Dr. Chafer, California; Dr. Hickie, Birmingham; Messrs. Grinley and Co., London; Mr. Jenne, Halesowen; Mr. Hill, Clifton; Messrs. Riddle and Co., London; Mr. Beloe, King's Lynn; Mr. Clark, Bristol; Mr. Heywood, Manchester; Messrs. Whitehead and Co., Manchester; Mr. Crewt, Truro; Messrs. Wilson and Stockholme, Bury; Mr. Negan, Canterbury; Mr. Oldham, Monsall; Dr. Burham, Surat; Messrs. Clay and Sons, Manchester; Mr. Carmody; Mr. Gravatt; Dr. Buchanan, Glasgow; Miss Smith, Plymouth; Mr. Beckton, London; Mr. Giles, London; Messrs. Kegan Paul and Co., London; Mr. Birchall, Liverpool; Mr. Sloane, Bradford; Mr. Faberner, Wigan; Mr. Sharpe, Walsall; Mr. Bluett, Brighton; Mr. Hodgson, London; Mr. Freeman, London; Mr. Paul, Liverpool; Mr. Sargent, London; Messrs. Bell and Co.; Mr. Craske; Mr. Hammond, Clifton; Messrs. Shanks and Co., London; Dr. Money, Rickmansworth; Messrs. Hawkes and Co., *London; Mrs. Tillett; Quæstor; Mechanic; Rest;* H. O.; Mutare Sperno; Mars; An M.D. of New York; Haslingden; J. G.; The Matron, Eston; W. C., Bath; Sanitas, Hyde; G. S. D.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Hind; Mr. White, Bayswater; Mr. Cane; Mr. Peirson, Ipswich; Mr. Deane, Cawnpore; Dr. Hawkin, Manchester; Mr. Bird; Dr. Adam, West Malling; Mr. Vines, Shepton Mallet; Messrs. Dickson and Russell, Edinburgh; Mr. Kinder, Leicester; Mr. Reynolds, Derby; Mr. Young, Hawkhurst; Mr. Watson, Glasgow; Mr. Brown, Pimlico; Mr. J. Barker, London; Mr. Skinner, Winchelsea; Mr. Cotterell, Bicester; Mr. Stack, Dublin; Mr. Parker, Sidmouth; Mr. Micharlescue, New York; Miss Wade, Chorley; Mr. Symons, Dumfries; Mr. Dolby, Cannock; Mr. Morris, Swansea; Mr. Duke, Freshwater; Mr. Hunter, Turnham-green; Miss Bretherton, Preston; Mr. Sloane, Bradford; Mr. Bridgman, Barnstaple; Mr. Eberle, Thirsk; Dr. Harding, Wigglesea; Mr. Smallman; Mr. Shepherd, Putney; Mr. Stilliard, Birmingham; Dr. Gledhill; Z., Newcastle-on-Tyne; Medicus, Halifax; G., Southport; Surgeon, Buckfastleigh; Delta, London; Lady Superintendent, Bangor; M.D., Wigan; F.S.A., Wye; Omega, Pontnewydd; M.B.; Medicus, Glasgow; Beta, Frizington; T. W. L. B., Great Yarmouth; Boon, Hulme; C. F. D., Bury; H. O. M.; Medicus, Leicester; D., Cradley Heath; H. B. G.; Drax, Dublin; The Secretary, Carmarthen; W. G., London; M.D., London; Physician, St. Lawrence; B. B.; Medicus, St. John's Wood.

Scotsman, Aberdeen Herald, Hertfordshire Mercury, Burton Advertiser, Southport Visitor, Stirling Reporter, &c., have been received.

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Croonian Lectures

ON THE

HYGIENIC AND CLIMATIC TREATMENT OF CHRONIC PULMONARY PHTHISIS.

Delivered at the Royal College of Physicians,

BY HERMANN WEBER, M.D.,
PHYSICIAN TO THE GERMAN HOSPITAL.

LECTURE III.

(Concluded from page 695.)

Duration of stay, and season of the year.—The time during which an invalid ought to stay in elevated regions varies greatly, according to the nature of the case, from four and six months to as many years, and general rules can scarcely be laid down. He ought to remain until he is cured, or until it is seen that the climate does not suit him. An additional advantage of these climates is that the majority of patients can remain throughout a whole year, with occasional changes to allied, not to distant, localities. The winter season is the best in the Alps; spring is the time of general melting of the snow, and soil and air are damper than in winter, so there is more risk of chills and possibly of microbic infection than in winter, but this risk is not greater than in lower regions, where the air at the same time is more relaxing. The descent to lower regions ought therefore not to be the rule, as it is at present, but the exception, and this only after careful consideration, and with all due precautions as to travelling, selection of locality, rooms, &c. In summer it is desirable to select mountain places which are rich in pine forests, in order to have shade from the sun and the additional benefit of the exhalation of the pines. The first part of autumn is very good, while the second forms a transition stage to winter, and is often unfriendly. Where it can be arranged, the stay in the European Alps ought to commence in August or the beginning of September, in order that the acclimatisation can take place before the changeable transition stage begins.

You will ask me which elevation is required to bestow on a cality the character of a mountain climate. This varies reatly according to the degree of latitude, distance from ne sea, and other circumstances on which I cannot enter at resent. The character of the vegetation is to some degree good criterion. In the flat regions of Northern Germany an elevation of 1500 feet is sufficient to produce a vegetation which somewhat resembles that of the Swiss Alps at an elevation of nearly 5000 feet, and of the Peruvian Andes at 10,000 or 11,000. The isothermal lines are likewise a help in this question. We may perhaps say, but only roughly, that in Europe north of 50° an elevation of about 1600 feet has already some characteristics of mountain climates; while between 50° and 48° latitude about 1700 feet to 2500 feet are required; and between 47° and 46° latitude from 3000 to 5000 feet. I need, however, scarcely tell you that I think all the climatic characters of a mountainous region in North Germany or Northern France at an elevation of 1600 to 2000 feet are the same as those of 5000 or 6000 feet in the Swiss Alps. The average air temperatures may be similar, and also the time during which the ground is covered with snow, but the rarefaction of the air must be less great at the lower elevations. The air is heavier, the light and sun-heat are less intense, and the moisture is mostly greater. About the microbes I am not yet sure; their distribution is likely to be unequal; but where there are only few human habitations, and few sources of organic decay and putrefaction, where the soil is dry and especially where it consists of granite and gneiss, with absence of stagnating water, there the microbe element will probably be scantily represented.

From what I have said you will expect me to recommend altitude climates in hereditary and acquired tendency to phthisis, and especially in cases with imperfect expansion of the thorax and the so-called "phthisical habitus"; and further, in all conditions comprised by the term phthisis, excepting those which I must describe as non-suitable viz., (1) consumptive patients, who belong to what I have termed the erethic constitution, whether the affection is early or advanced; (2) phthisis in a very advanced stage; (3) phthisis complicated with emphysema; (4) phthisis complicated with albuminuria; (5) phthisis complicated with disease of the heart; (6) phthisis with ulceration of the larynx; (7) phthisis with rapid progress and constant pyrexia; (8) phthisis with great loss of substance; (9) phthisis with considerable empyema; (10) phthisis in persons who cannot sleep or eat in high elevations, or who feel constantly cold. Some of the conditions are not permanent, but only temporary and removable obstacles. Tendency to hæmoptysis was formerly regarded as forbidding mountain climates, but experience has shown that this is incorrect; that, in fact, hæmoptysis occurs much less frequently in high than in low regions, and is often prevented and checked by a stay in high regions (Archibald Smith, Brehmer, Spengler, Unger, Dettweiler, C. T. Williams, Denison, Solly, Ruedi, Peters, and Hermann Weber).

After having discussed the general characters and influence of the climates of elevated regions, I must limit myself to a few remarks only on the principal health resorts, as time compels me to do so; and as there already exist numerous descriptions in the English language by professional and non-professional authors, I need not tell you that the difference between the different localities included in this class of climates is very great, and is only yet partially known and appreciated; that even in the same Alpine valley, and in the same place, there are great differences between different situations, and that the climate of the same place is by no means uniform in different years.

We naturally begin with the Swiss Alps, as they are nearest to us, and with Davos Platz about 5100 feet above the sea level, as it was the first place resorted to just twenty years ago, when two patients migrated there from Gorbesdorf, Dr. Unger and Mr. Richter, who there regained their health and are still living at Davos in active occupation. They were encouraged to give a prolonged trial to the place by Dr. Spengler, who had already written on the absence of scrofula and phthisis in the Davos Valley. As I had been on the look-out for a suitable place in the Alps for some years previously, in consequence of some encouraging experiences which, I might say, accident had thrown in my way, I soon afterwards began to send patients there. When I first directed attention to Davos Platz in 1867 it was still a charming primitive Swiss village; now numerous large and small hotels and villas stretch along the high road for more than a mile, and Davos Dörfli, a little higher up in the valley, may almost be considered as a suburb of Davos Platz. Waters, Spengler, Frankland, Unger, Clifford Allbutt, Addington Symonds, C. T. Williams, Burney Yeo, Peters, Marcet, Otter, Jaccoud, Sée, Symes Thompson, and others have amply described the peculiarities of Davos. The presence of good physicians, the more and more improving arrangements in the hotels, including sunny terraces and verandahs, the means of varied exercise and amusement, the comparative nearness to the railway, a good road thence (from Landquart or Chur) to Davos without an intervening high pass, are accessory, though very important, to the general climatic characters of Davos Platz and Dörfli. A drawback is that its reputation has of late years increased so rapidly that too many, frequently ill-suited, cases are sent to Davos; that the number and size of the hotels and health establishments increase at an alarming rate, so that there is actual danger that Davos may be ruined by its own original advantages; *for purity or aseptic quality of the air is incompatible with the crowding together of a large number of invalids.* Mr. J. Addington Symonds, the author of "Davos in Winter," has written on this subject in the *Pall Mall Gazette* of Jan. 14th, 1882; and I have likewise already mentioned this matter in a paper on Climate and Health-resorts in the "Book of Health." If Davos were to be ruined, the calamity would not be confined to the inhabitants of the valley, but would be shared by many invalids all over Europe.

Lower down in the Davos Valley, at Davos Frauenkirch, a small hotel offers fair accommodation to a limited number of invalids; and further down, but high above the bottom of the valley of the Landwasser on the sunny southern slope of the Rothornstock, lies Wiesen, of about 4770 feet of which Dr. Tucker Wise has given an attractive description. It is well sheltered from N. and N.E., but is rather more exposed to S.W. wind than Davos, and the snow does not lie quite so long. The hotels and the social attractions are not so advanced as those at Davos, but the stay is less expensive and under the guidance of Dr. Buol, an intelligent Swiss doctor, who is a licentiate of the London College of Physicians, results can be obtained in suitable cases, even with limited arrangements.

The Upper Engadine is a fair rival to the valley of Davos, and the village of St. Moritz, about 6000 feet above sea level and 280 feet above the lake, with the well-known Kulm Hotel and the houses of Kaspar Badrutt, represents the Davos Platz of the neighbouring valley. St. Moritz has been so well described by Dr. Burney Yeo, Mr. Lionel Tollemache, Drs. Ludwig, Biermann, and many others, that I must confine myself to a very few remarks. Davos is somewhat more sheltered and is slightly warmer than St. Moritz, and is nearer to the last railway station for those coming direct from England or the North. St. Moritz lies 900 feet higher, has the advantage of the snow somewhat longer. has decidedly more wind according to the observations of Mr. Waters, has a skating rink and a good lawn tenis court in the immediate neighbourhood of the hotel, and more opportunities for exercise. On the whole, Davos has some advantages for more serious invalids; St. Moritz for hardier cases. The best sites in the Upper Engadine would probably be found in the neighbourhood of .Pontresina on the south western slopes of the Muraigl on the Munt Della Bescha; they would have the largest share of sunshine during the shortest days of the winter, would be in the immediate neighbourhood of pine and larch forests, and out of the way of the Maloija wind; but the hotel proprietors of Pontresina are as yet hostile to the scheme of a winter cure, fearing that their summer guests would leave them if they were to open that favourite spot for the treatment of phthisis. They are apparently strong contagionists. But there are sites, for instance, near Acla, about 6000 feet above sea level, to the right of the road from Pontresi na to Samaden, over a mile from the former, where one or two health establishments might be placed without prejudice to the visitors of Pontresina.

Samaden has been for many years used by some consumptive patients as a winter resort, and the excellent fare and service at the Hotel Bernina make to some degree good what the absence of open and covered verandahs and balconies and terraces leave to be desired. Above Silvaplana and Campfer, on the southern slopes of the Piz d'Albana and Piz Valaschin, good sites could be found. The establishment of the Kursaal Maloja is rather exposed to wind, and not high enough above the upper end of the Lake of Sils to be perfectly free from damp and mist at all times of the year; but the Kursaal itself is dry, and the large corridors for indoor exercise, the arrangements for constant and abundant supply of warmed air to the rooms and passages, and the good cuisine make atonement for some defects in the position. Dr. Tucker Wise, who is the resident medical officer, has given an encouraging description of these arrangements; and such improvements as sheltered out-door seats and pavilions were in the course of erection when I was there on a visit during the autumn of 1884. Independently of permanent residence the Maloja Hotel can do good service as a place of transition—for instance, during the melting of the snow when out-door exercise is difficult. A few weeks at this place will occasionally be an advantage to visitors at St. Moritz or even Davos, as they can walk for hours every day in the well-aired corridors without exposure to draught or dampness. The localities mentioned, and Zuz in the Upper Engadine, are all the winter health-resorts in the High Alps which are open to us at present. There would be some satisfactory places in the Dolomites, as above Cortina, and perhaps San Martino di Castrozza and Campiglio, but there are no arrangements for the winter as yet.

In a much lower situation is St. Beatenberg, above Lake Thun (3766 feet), quite sheltered from the north and east, quite open to the south, and very sunny. It is only lately that the proprietors of the Kurhaus have commenced to keep the hotel open, and I cannot therefore speak of the results. The Hotel des Avants (3212 feet above sea level, and 2000 feet above the Lake of Geneva) has a very sunny situation, and is already out of the region of mists in winter. The arrangements of the hotel are good, but the snow does not lie so long as at Davos and St. Moritz; and although preferable in many ways to the lower localities on the lake, it is not as bracing as the health resorts in the Grisons. Seewis, (2986 feet), above the road from Landquart to Davos, has a cheerful sunny and sheltered situation. Such localities will probably, by degrees, take an important place as *intermediate health resorts* for intermediate cases; for such, to use an instance in which the usefulness of higher localities is doubtful, or in which they are certain to be unsuitable, where, however, a surrender to the low level places is undesirable; or as temporary places—viz., as steps to or from the higher health resorts. Seewis, for instance, is well adapted as a stepping-stone to Davos and St. Moritz. In order, however, to become really useful, they must, as Seewis has done, provide themselves with good resident medical men, as without this it would be wrong to entrust to them cases requiring special care.

I must now name two localities in Germany which deserve your attention, although I can mention them only in a cursory manner: these are Görbesdorf in Silesia, and Falkenstein in the Taunus. Görbesdorf, about 1740 feet above the sea level, is the cradle of the mountain health resorts, and of the hardening open-air treatment in Europe, with a judicious admixture of hydro-therapeutics. Dr. Hermann Brehmer has the merit of having introduced this combination in a systematic manner, coupled with the strict supervision of the patients, essential in the hygienic as well as therapeutic management. Brehmer's establishment lies in a beautiful park, with a pine-clad hill belonging to it, arranged for graduated climbing. The establishment is provided with covered walks of great length, and with a winter garden, suitably warmed and ventilated. Falkenstein, about 1500 feet above the sea level, has become, under the judicious as well as energetic guidance of Dr. Dettweiler, a health resort where not only many invalids have been improved and cured, but where they have learned how to manage themselves afterwards. The results obtained at this establishment show how much can be done in phthisis by carefully arranged hygienic management, even with imperfect climatic elements.

During the last few years several other establishments have been formed which are likely to become useful, and to lead to further imitation. Aussee, in Styria (2150 feet), St. Blasien (2500 feet), in the Black Forest, Reiboldsgrün (2257 feet), in the midst of a forest near the railway station of Auerbach, in Saxony, and Badenweiler (1380 feet), in a beautiful position on the south-western slopes of the Black Forest, deserve to be specially mentioned.

In Norway the Gausdal sanatorium, about 3000 feet above sea level and 2500 feet above Lake Mjosen, and twenty-four miles from Lillehammer, has been mentioned to me as a probable health resort for consumptives.

More important to us in the treatment of phthisis are the health resorts of America. In the Peruvian Andes and the Rocky Mountains of the United States they possess indeed an endless variety of mountain climates. Near the equator, elevations of 6000 and 8000 feet have winter temperatures similar to our summer temperatures, and we must go still higher to find localities suitable to the treatment of phthisis. But at greater distances from the equator we come at elevations of about 6000 or 7000 feet, to climates somewhat similar to those in the Alps at about 5000 to 6000 feet. In the neighbourhood of Jauja and Huancayo, at elevations varying from 8500 to 10,500 feet, several of my patients have recovered from rather advanced affections of phthisis, after I had learned the character of these climates, and had been encouraged in sending patients there by my late friend, Dr. Archibald Smith of Lima, whose papers on these subjects are well known to you. How different, however, these climates are from the Swiss Alps, you may see from the following statement of Archibald Smith:—"At Huancayo, 12° south latitude and 75° 12′ west longitude, the annual range of temperature in the shade may be taken as ranging from 8° or 9° to 14° R.; while at the cooler town of Jauja, with from 10,000 to 15,000 inhabitants, the range during one whole year has been observed not to exceed from 8° to 12° R., or from 50° to 59° or 60° F., with the sky always clear and sunny, and an atmosphere pure and bracing, which invites to outdoor exercise and enjoyment." From no other localities have I seen such good results as from Jauja; but also from Santa Fe de Bogota (about 10,000 feet), Quito (about 10,000 feet), La Paz (12,000 feet), and Cuzco (11,250 feet), I have occasionally received good reports. Areguipa, in Peru, 16° south latitude, has lately been recommended by Dr. Dixon Hunter, with an equable temperature, averaging about 65° summer and winter within the house and outside in the shade during the day. I have no doubt that this climate is infinitely better than many others, especially the hotter regions along the sea-shore, and that consumption can be cured there; but it is somewhat too warm.

The Rocky Mountains in the United States of America have only been used as health resorts in phthisis, so far as I know, during the last fifteen or sixteen years, and they seem to have met likewise at first with much opposition; at all events, during the last ten years the advice I have given to several American consumptive patients to settle at Denver or Colorado has been rather severely criticised by New York and Philadelphia doctors, especially in two cases of hæmoptic tendency, and yet these patients did well when they afterwards carried out the advice. Manitou springs (6315 ft.), Colorado springs (5775 ft.), and Denver (about 5000 ft.) are the best known localities, and have been repeatedly described by Drs. Denison and Solly; but numerous other resorts of the future are mentioned in Dr. Denison's instructive work on "The Rocky Mountains Health Resorts." Dr. Frankland has quite lately mentioned to me in this territory a locality which is likely to become an important health resort—Yellowstone National Park, accessible by the Northern Pacific Railway. It is situated on the eastern slopes of the Rocky Mountains, between 44° and 45° N. lat. "The park abounds in magnificent geyzers and boiling springs on a most gigantic scale, and there are plenty of mineral waters. The boiling water and steam might be made available for warming hotels, but there is also an abundance of wood fuel. There is so much room in Yellowstone that there need be no overcrowding, as at Davos."

Mexico, too, possesses good health-resorts, especially the town of Mexico and Puebla, about which the well-known works of Jourdanet and Guilbert contain valuable information.

The South African altitudes have been described by Symes Thompson and the late Harry Leech and by several non-professional writers—Trollope, E. F. Sandeman, and Otter. The most important health-resorts are contained in the Orange Free States, Griqualand West, and the Transvaal. Bloemfontein (4700 feet) is the best known place; but among others equally suitable are Christiania, Bloemshoff, Potchefstroom, Witwater Rand, Pretoria, Heidelberg, Utrecht, Standerton, and Wakkerstroom. Everywhere the climate is dry, and often in summer very hot, and in winter cold. I have seen some good from these localities, but the promise of "the absolutely perfect cure" held out many years ago by some inhabitants of the Free States has not been fulfilled. Whenever we recommend these regions we must bear in mind that a sea voyage and a long land journey are implied. Those who are good sailors will not regret the former, and the latter can be rendered beneficial if the invalid is not too weak and does not mind expense. The best mode to reach the high regions is still a well-supplied ox waggon from Graham's Town or Wynberg. "Waggon travelling with the traveller's own oxen," Mr. Otter justly says, "is very slow work, not averaging more than ten to twelve miles a day, but as such an expedition is only made for the sake of health, the rate of travelling is not material, and when once a traveller has got into a district which is suitable to him he is in no hurry to get out of it."

Many of the great mountain chains of Asia contain, no doubt, useful health resorts, but our dependable knowledge is almost confined to the Himalayas, which enclose, you may say, all varieties of climate, stretching along as they do for about 2000 miles, with an average width of 180 miles and elevations ranging from 1000 to 23,000. There are, besides, the Neilgherry range, the Pulneys, the Aravulli or Aravelli Mountains, the Vindhya range, the Western and Eastern Ghauts, and several other ranges. There are health resorts varying from 4000 to 8000 feet elevations. In considering these stations we must always bear in mind the nearness to the equator, and, further, that the peninsula is surrounded, excepting its broad base, by enormous masses of warm water. The periodical winds coming from these seas are saturated with vapour, which on reaching the cooler mountain ranges is partly deposited as rain. The emanations from the damp soil are probably laden with microbic life. The majority of the Indian Hill stations have therefore very different climatic conditions from those of the Peruvian Andes, the Rocky Mountains, and Swiss Alps. These circumstances may explain the contradictory views of Anglo-Indian medical men regarding the influence of their hill stations on phthisis. The carefully drawn up report, however, of Dr. Kellett on consumptive soldiers, who spent six months (April to November) at the convalescent station of Landour, shows results which are not unsatisfactory. Very different must be the climates on the northern slopes of the Himalayas, for the atmosphere before reaching them has lost the greater part of its moisture; on the southern slopes and highest ridges the climates must be drier and cooler, and very possibly Thibet (9000–11,000 feet) and Cashmere (5000–6000 feet) contain most healthy climates.

I had intended to survey with you, gentlemen, the climates of Nubia and Egypt, of Algiers, Italy, Spain, the Riviera, and south-west of France, of Australia, New Zealand, Madeira, Teneriffe, and the high seas, in their applicability to the treatment of phthisis; but time fails, and I hope you will pardon me for having spent so much time over other matters, and that you will not think I regard the regions which I pass over as useless. They have been so often and so well described by others as well as elsewhere by me, that my present omission can scarcely be regretted. Many of the localities included in these climates possess very useful qualities for the treatment of phthisis, and especially for those conditions and constitutions which are either temporarily or permanently debarred from the benefits of the altitude climates; but I regret to say that as yet the arrangements are nowhere perfectly satisfactory, even at the most favourite places, supplied with all the modern comforts, such as Cannes, Mentone, and San Remo; the majority of invalids are in the habit of acting almost independently of their medical advisers, and many perish who under strict guidance might have been saved. The personal character and professional superiority of a Dr. Frank, a Bright, a Charles, a Siordet, or of one of the other physicians practising there, may in some, even in many, cases exercise so powerful an influence as to command a willing obedience; but the whole system of this looseness of tie between doctor and consumptive patient is deplorable, and the results obtained are very inferior to those which might be obtained by judiciously arranged health establishments, under strict medical guidance in every point of general and personal hygiene. This, however, is by many invalids not yet regarded as the principal sphere of the physician's work, but more or less as everybody's business, for which no doctor is required, and which *each individual* must find out for himself.

I also regret very much that I cannot properly discuss the climates of Great Britain and Ireland. These islands contain on their different coasts and in their interior a great variety of climates, which have been well described by Sir J. Clark, Thorowgood, C. T. Williams, Tripe, Buchan, and others, and I have likewise given short sketches of them. With all the differences, great as they are, between the east and west, south-east and south-west coasts and the different inland localities, there are certain traits of character more or less common to all of them—viz., a high degree of humidity; greater warmth than is due to the geographical latitude; comparative equability with regard to seasons and periods of the day; an analogous degree of sunlessness and dulness of atmosphere; and considerable movement of the air, almost amounting to windiness. All these localities as a set-off possess hygienic arrangements which are superior to anything which is to be met with abroad, good food, and good accommodation; they are of easy access, and do not require a complete separation of the invalid from his family. The physiological influence on the constitution compared with foreign localities of a similar elevation may be designated as more or less tonic and health-giving, though not exhilarating, and as requiring a certain degree of energy and integrity of constitution. We possess in these islands good climates for preventive treatment; but we are not so well provided with localities assisting the treatment of developed phthisis, where the lungs and the constitution have partially lost their integrity and energy. We ought therefore to do everything to mend the defects of these our climates, and to render the good qualities available, and concentrate them if possible. Is this done at our health resorts for the treatment of phthisis? No, gentlemen, there are no such arrangements, or almost *none*, on the coasts of Devonshire, Hants, Sussex, and even the Isle of Wight, excepting the few sanatoria. Let us use our influence with our local professional brethren, who are neither deficient in knowledge nor in insight, and with the local proprietors and public, to obtain well-placed and well-arranged houses for the invalids, with suitable balconies on which light couches and shelters for open-air treatment can be placed, good large verandahs with movable glass doors; open and covered walks and winter gardens for exercise in windy and rainy weather; seats of different nature with turnable shelter; quadripartite glass-covered seats, like those at Hastings and St. Leonards, for which these places deserve commendation; walls for shelter from wind, and for reflection of the sun when it shines. We must induce our patients to place themselves under the entire control of their local doctors during their whole stay at one of our health resorts, and to learn that the guidance of the doctor is as important as the climate, and in many cases more so. By judicious management the doctor is often able to counteract the disadvantages of an indifferent climate and to bring into action all its good points, while without the guidance of an intelligent physician the natural and social attractions associated with a satisfactory climate may become sources of failure. There is no doubt in my mind that it would be a very great advantage to many invalids, especially those who are not very rich, if there were well-arranged health establishments under the supervision of good medical men, and that through them better results could be obtained from our home climates.

And once more, gentlemen, let me plead for the multiplication of small hospitals in good situations for the consumptive poor, such as I have sketched in the second lecture. You have always treated me with so much kindness and consideration since you have, so to say, adopted me as one of yourselves, that I am hopeful you will give your countenance to the plans I have suggested, and that through you they may lead to some good; then, gentlemen, the recollection of the hours which I have had the pleasure of spending with you in these lectures will belong to the brightest of my life.

CASE OF

BULLET WOUND (PENETRATING) OF THE ABDOMEN, WITH NUMEROUS PERFORATIONS OF THE INTESTINES, TREATED BY ABDOMINAL SECTION.

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A note of the following case will, I trust, be considered of general interest, and also of special interest in connexion with the recent discussion at the Royal Medical and Chirurgical Society.

T. R——, aged fifteen, was admitted to the Edinburgh Royal Infirmary, under my care, on the 9th of March of this year. One hour before admission he was standing in front of a companion at a distance of about two feet, when a loaded revolver which was in his companion's hand was accidentally discharged, and the bullet struck him in the abdomen. The patient did not fall, but, placing his hand on his abdomen, he walked about a hundred yards into the nearest house, where he was carefully attended to, made to lie down, and a temporary dressing applied over the wound. He was then conveyed to the infirmary, where he was at once seen by me. On inquiry it was ascertained that the bullet was conical in shape, a quarter of an inch in diameter at its base, and a little more than half an inch in length.

On admission there was slight general shock, and the patient complained of a little pain in the region of the abdomen and pelvis; but he was perfectly sensible, and gave an intelligent account of the accident. The clothes had been slightly disarranged in applying the dressing, but on examination there was seen to be a round hole in the double fold of the trousers in front, a similar hole through the flannel drawers, three distinct holes in the flannel shirt, which was in folds at this point, and, lastly, an opening in the flannel jacket worn next the skin. The textures for a short distance round the holes in the clothes were scorched. The temporary dressing having been removed, there was found a rounded opening in the abdominal wall, with ragged and scorched edges. The position of the wound was an inch and a half below and half an inch to the left of the umbilicus, its diameter being rather more than a quarter of an inch. A probe was carefully introduced into this wound, but, as its point became obstructed in the substance of the left rectus muscle, it was not further employed.

Operation.—Chloroform having been administered, an incision an inch and a half in length was made in a longitudinal direction, the bullet wound being included in its centre. The various tissues of the abdominal wall were carefully incised until the peritoneum was reached, when a narrow slit was seen in the latter membrane, and protruding through it there was a small piece of bruised omentum. This portion of omentum having been carefully pushed aside, a small knuckle of uninjured small intestine presented itself. The peritoneal wound having been slightly enlarged, another knuckle of small intestine with three distinct perforations in it at once protruded. Two of these openings were situated within a quarter of an inch of each other, the third at a distance of about an inch and a half from the others, on a different aspect of the gut. These three openings were stitched by means of a continuous suture of fine catgut after Lempert's method. Both the external and peritoneal wounds were now enlarged upwards and downwards, so as to allow a more complete search of the abdominal contents. When this was done a considerable amount of blood oozed up from the deeper part of the abdominal cavity, and on drawing aside some folds of intestine this hæmorrhage was seen to come from a large vein in the mesentery, which had been perforated by the bullet; this vein was seized and ligatured with catgut. A further examination of the intestines showed two more perforations in the small intestine—two in the descending colon, and two in the pelvic portion of the rectum; all these were sutured with catgut, as in the case of the first three wounds. A careful search did not discover the bullet, and no injury to the bones of the pelvis or to the vertebræ could be found. No extravasation of fæcal matter was observed, but there were several large clots of blood lying in the pelvis. During the operation the exposed intestines were carefully protected by towels soaked in a warm solution of corrosive sublimate (1 in 2000), and the whole cavity of the abdomen and pelvis having been sponged out with the same solution, the external wound was closed by means of deep and superficial sutures. After the operation the patient's pulse and strength were good, and a half-grain morphia suppository was introduced. In the evening the patient expressed himself as feeling comfortable, and his pulse remained good. Early on the following morning he became restless, complained of pain in the abdomen, and showed symptoms of exhaustion. He did not rally from this, but died about 12 o'clock, twenty-four hours after the accident.

Necropsy.—On opening the abdomen the intestines were seen to be much distended with gas, and the abdominal cavity contained about six ounces of brick-red serum. The first three wounds in the small intestine were situated about three feet and a quarter below the duodenum, and the other two wounds about two feet two inches below this point. The other wounds, as mentioned, were situated in the colon and pelvic part of the rectum. On passing a powerful stream of water through the intestines, they were found to be perfectly watertight, except that there was a slight leakage where the three intestinal perforations were situated close together. After considerable search the bullet was found lying on the right side of the pelvis immediately in front of the ischial spine. There was no injury to the bones or other structures.

Remarks.—This case is an interesting example of the deviation of a bullet, which, having entered the abdomen a little to the left of the middle line, perforated the small intestine, the descending colon, and the rectum, and, passing across, lodged low down in the right side of the pelvis. In order to diagnose the exact nature of the wound in this case, the principle of carefully incising the abdominal wall so as not to divide the peritoneum in the first instance was carried out, the bullet wound being kept in the centre of the incision as a guide. The gentle use of the probe gave no satisfactory result, except to prove that the bullet had passed into or through the rectus muscle. Had the wound been a non-penetrating one, my incision would have been attended with little risk, and it would in all probability have allowed the bullet to be detected and removed if it had lodged in the abdominal wall or any other accessible place. Although this case terminated fatally, the result of the operation, as proved by the post-mortem examination, is, I think, encouraging, and should another case of this kind come under my observation I would not hesitate to carry out the same principles of treatment. The very important and suggestive papers published in 1882 by the late Dr. Marion Sims, and the experiences and suggestions of distinguished American and other surgeons as the result of their large experience in military practice, form material and considerations worthy of the careful attention of all practical surgeons; and a study of them and of other facts in connexion with abdominal surgery, together with a knowledge of the fatality of these injuries, had prepared me to carry out active interference should a suitable case present itself. The complete staying of the hæmorrhage from the wounded mesenteric vein was an important result of the operation, and the entire absence of fæcal extravasation was also a most satisfactory point. The slight leakage which took place when a stream of water was passed with some force through the intestinal canal after death would not, I think, have led to any injurious effects during life. It can be readily understood that it was difficult, if not impossible, to ensure a perfectly aseptic condition in such a case; and I am inclined to think that drainage of the abdominal cavity would be advisable under similar circumstances. I did not employ drainage in my case because the abdominal cavity after the operation appeared to be perfectly free from blood-clots and fæcal or other extravasation; and I had hoped that the free use of the corrosive sublimate solution would have counteracted any septic mischief.

Edinburgh.

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D. LOND.

No. I.—THE TESTS FOR THE BILE SALTS, WITH DEMONSTRATION.

(Concluded from page 701.)

The peptone test solution.—Having got out the fact that bile salts when present in the urine precipitate a proteid from an acid solution, it was an easy matter to discover how to apply it as a practical test. On substituting for the acidified albuminous urine an acidulated antiseptic solution of peptone, I obtained a test solution much better in all respects, being readier and more delicate, and withal a preparation devoid of all objectionable qualities.[1]

The reaction.—When twenty minims of urine, containing bile salts in pathological quantity, are run into sixty minims of the test solution, an opalescence appears proportionate to the amount of the bile derivative. [Experiments shown.] It differs from all other urinary precipitates induced by an acidified reagent, in dissolving up completely on adding a drop or two of acetic acid or a citric test-paper;[2] and in diminishing, but not disappearing, on boiling.[3] The opacity is not affected by such warmth as suffices for the solution of urates, or even by a higher temperature than this implies. You observe that when the test solution is run upon urines containing an excess of bile salts, an immediate and very distinctive reaction takes place where the fluids meet—namely, a sharply defined white band of precipitated peptone; and on oscillating the tube, so as to mix up a little of the urine with the test solution, the upper part of the column presents an opacity, the density of which is proportionate to the amount of the bile derivative present, in marked contrast with the transparency of the urine below. On further agitation, a limit is reached when the opalescence diminishes, and perhaps finally vanishes; then it is restored on adding more of the test solution.

Delicacy of the test: objections.—The test is undoubtedly a very delicate one, for I have readily determined by it the presence of one part of bile salts in at least from 18,000 to 20,000 parts of a solution of chloride of sodium. The question will naturally be asked, Is there anything besides bile salts in the urine that will react in like manner with an acidified solution of peptone? So far I have *failed* to put my finger on any such constituent; and I have tried several, among them kreatin, kreatinin, leucin, tyrosin, hippuric acid, and fatty acids (monatomic and diatomic).[4] Besides this failure to discover in the urine a non-biliary substance that can precipitate the peptone, all the positive evidence hitherto obtained undoubtedly supports the position that it is a liver-derived product present in the urine which reacts with the test. The testimony of the facts is cogent in this direction. (*a*) The biliary salts extracted from the bile produce an identical reaction. (*b*) The liver is the sole organ that furnishes a secretion which precipitates a proteid from an acid solution. All the secretions except bile either do not act on the proteids at all, such as saliva, or they dissolve them, such as the gastric and pancreatic juices; and, furthermore, the biliary salts are the only constituents of the bile that possess the property of throwing a proteid out of solution. (*c*) Then I must refer you to the physiological and clinical data which I hope to bring forward in my next communication. These definitely show the connexion that subsists between the proportions of the substance which the peptone test detects in the urine, and the varying degrees of activity of the liver, as well as the diseases and disorders of this organ. I have checked mucin and urates—the fallacies to which all acid urinary tests are liable. The *mucin* of urine of normal reaction is in acid solution. I have elsewhere[5] shown that when this albuminoid body is thus dissolved it is not precipitated by the addition of further acid. So that when this constituent is thrown down in urine of acid reaction, it seems highly probable that the acid added is not the reagent, but merely supplies the requisite degree of acidity to enable the precipitant already present to operate—as in the case of the bile salts and albumen. If so, a mucin precipitate merely indicates the presence of bile salts. Furthermore, on running the test solution on the muciparous mixture of normal urine and clear saliva, the reaction is rather diminished than intensified, and it is *nil* when a solution of chloride of sodium is substituted for the urine. Then, again, the methods of observation requiring a uniform low specific gravity obviate a liability to error from this cause.

Urates.—Inasmuch as the modes of testing—both qualitative and quantitative—require the uniform dilution of the urines to the specific gravity of 1008, a condition is provided which secures the solution rather than the deposition of urates; so that all observations may be trusted without the necessity of resorting to warmth as a corrective. Even when testing the urine undiluted, I have not once observed a precipitation of urates.

The mode of preliminary testing.—In every case the urine to be tested must be quite clear. If turbid from urates, it should be clarified by warmth; if from phosphates, very small pieces of citric test-paper should be added and shaken up with the urine until it becomes transparent, special care being taken not to acidify beyond this limit. It is, upon the whole, best to filter turbid urines; and this proceeding is necessary if the cause of the opacity is organic or doubtful. When the urine is cloudy from blood, it should first be boiled[6] and then filtered, for filtering alone does not clarify it. The specific gravity of the urine is to be reduced to 1008.[7] The object of this direction is to obviate fallacious inferences apt to be drawn from reactions with urines of varying densities: concentrated urines often reacting as if there were present an excess of bile salts; and urines of low specific gravity, though sometimes affording a reaction similar to that of normal samples, actually containing an increased proportion. Twenty minims of urine are added to sixty minims of the solution. If the bile salts are present in excess a distinct milkiness appears, which develops somewhat further in the course of a minute or so; and the depth of the opacity is proportionate to the amount of the bile derivatives. If the urine contains the average proportion found in the majority of healthy urines—or, of course, less than that proportion—the reaction is a mere tinge of milkiness, which is, moreover, not immediate.

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[1] The following is the formula for the solution:—Pulverised peptone (Savory and Moore), thirty grains; salicylic acid, four grains; acetic acid (B.P.), thirty minims; distilled water, eight ounces. Perfect transparency is obtained after repeated filtration.

[2] When, after dropping in the test-paper, the tube is set aside for a minute or two without shaking, the observer will find the portion below quite transparent, and that above still opaque; and on shaking up the contents he will disperse the opalescence throughout.

[3] When the test solution is precipitated by bile salts, the precipitate has the same peculiarities; dissolving when further acidified, and lessening—certainly not vanishing—when boiled.

[4] It is well known that a concentrated solution of chloride of sodium in the presence of an acid will precipitate a proteid. When the chlorides of the urine appear in excess, will they react with the test solution? Experiment shows that when the peptone solution is run upon a solution of salt of any specific gravity less than 1030 no precipitation whatever appears. Therefore the urinary chlorides are not a source of error, and more especially when it is called to mind that a condition of the testing is the reduction of all urines to the uniform specific gravity of 1008.

[5] Bedside Urine-testing. 3rd edition, pp. 110-11.

[6] Boiling the urine does not destroy the bile salts. It is true, if any taurocholate of sodium is present it is broken up, the products being taurin and cholate of sodium; but the peptone test reacts with the cholate as well as with the liver-secreted salt.

[7] This is done very readily by taking the specific gravity of the urine according to the method I follow (see Bedside Urine-testing), a bead of the specific gravity of 1008 being dropped into a measured portion of the urine contained in the tube graduated from 1008 to 1014, and water being added until the bead ceases to rise and remains stationary at any part of the column of fluid.

The contact method.—When the test solution is gently run over a urine (reduced to the specific gravity of 1008) containing bile salts in pathological amount, an immediate reaction takes place; but when the quantity is normal or subnormal, the reaction is not instantaneous—it gradually appears in the course of a minute as a delicate thread-like line, which may undergo a little further development during the lapse of a few minutes.

Quantitative estimation.—Clinical observation demands something more definitely comparable than can be derived from the mere qualitative testing; for it should decide as accurately as possible the quantitative variations of the urinary elimination of the bile salts observable in different pathological conditions, in the various stages of disease, and in the effects of treatment. I have therefore devised the following procedure to meet this requirement. A permanent standard of opacity is needed to represent the small average discharge of bile salts in healthy urine. For this purpose I have selected alumina precipitated by ammonia, because the permanency of this form of opacity has been proved by the alumina standard, which over twelve months ago I devised for quantitative albumen. The opacity of the fluid contained in this small tube is that provided by mixing together in equal proportion (sixty minims) the urine, reduced to the specific gravity of 1008, and the test solution. To sixty minims of the test solution the urine, of the specific gravity of 1008, is added, in ordinary cases ten or twenty minims at a time, and allowing a minute to elapse after each addition, until the opacity induced is seen to be exactly equal to or to slightly overstep that of the standard, the tubes being held to the light, *shaded by a dark background*, such as that of the coat-sleeve. If fifty or sixty minims of the urine bring up the opacity merely to that of the standard, the proportion of bile salts is not outside the normal range in the direction of increase. But any smaller quantity of urine required indicates an excess of the biliary derivatives over the physiological variations. The smaller the amount of urine needed, the larger the proportion of bile salts present, according to the following table:—

Urine.				Percentage increase of bile-salts over the normal maximum.
Minims.		Drops.		
1	or	2	=	3000
2	"	4	=	1500
3	"	6	=	1000
4	"	8	=	750
5	"	10	=	600
10	"	20	=	300
15	"	30	=	200
20	"	40	=	150
25	"	50	=	120
30	"	60	=	100
35	"	70	=	83
40	"	80	=	66
45	"	90	=	50

Charges of bile-salts beyond 700 per cent. increase over the normal maximum amount are only met with now and then; but they may be encountered in isolated samples of even non-jaundiced urine; as in a specimen I show you which I lately met with containing 1500 per cent. increase of biliary salts, but quite free from bile pigment.[8]

The peptone test-paper.[9]—I have arranged the peptone test in the form of test-paper, so as to serve the convenience of observers in the preliminary testing. The test-paper is permanent and reliable, and is best used in the following manner: The peptone test-paper along with half a citric paper is dropped into fifty or sixty minims of water in the larger test-tube or a wine-glass; after the lapse of a minute or so the solution is slightly agitated, and on being set aside for another minute[10] is ready for use. The solution thus prepared is taken up by the pipette and carefully run over the transparent urine, when, if bile salts are present in larger amount than the normal average, an immediate reaction is observed, as a pearly-white thread or band; but, with urine devoid of this excess, a delicate zone may appear, but only in the course of from one to two minutes. The test may likewise be employed equally well in the following ready way: The test-paper along with half a citric paper is dropped into sixty minims of water, and twenty minims of urine reduced to the specific gravity of 1008 are added. The contents of the tube are oscillated for half a minute, and then set aside for a minute, so as to allow time for the clearing away of gaseous particles and the development of the reaction. If bile salts are present in excess a distinct milkiness is apparent, but if in normal or subnormal amount there is only a slight haze, or no obvious change.

CHRONIC CHOREA OF FORTY-ONE YEARS' DURATION; NERVE-STRETCHING FOR RELIEF OF PAIN.

BY AYMER R. MACDOUGALL, M.B. EDIN., M.R.C.S.

THE LANCET of November 29th and of February 21st publishes papers by Dr. Saundby of Birmingham and Dr. J. C. McLearn, treating of the subject of Chorea in the Aged. While the matter is still fresh in the minds of your readers the following notes of a case of chronic chorea in a person of somewhat advanced years on whom nerve-stretching was performed will, I trust, prove interesting. At the outset I may state that the nerve-stretching was not performed with the primary object of curing the chorea, but was necessitated on account of severe and intractable pain, limited to the regions supplied by the anterior crural nerve. I hoped, however, not only that the pain would be removed, but that a favourable influence, even though slight, might be exerted on the chorea. As the sequel shows, in this I was not disappointed, for, though the chorea still continued, the movements were much less severe than they had been, while the pain itself was completely removed, and remained absent for rather more than two years.

The patient, Mary A——, aged fifty, an inmate of the Border Counties Home for Incurables, had suffered from choreic movements for the last forty-one years. Her family history was good; no evidence of nervous disease in any of the other relatives could be obtained. Up to the age of nine the patient was strong and healthy. At that time she received an injury to the lumbar portion of her spine, followed by partial loss of power in the lower extremities. Shortly afterwards spasmodic involuntary movements commenced in the muscles of the left calf. These, at first slight and localised, gradually became more diffused and severe. The left thigh became affected, then the right lower limb, and subsequently the trunk, arms, and head. This extension occurred very slowly, many years elapsing before the movements became general. During the last two years, even when assisted, she has been quite unable to walk. Prior to this when walking she frequently suffered from retropulsion.

At the time of operation the condition of the patient—a pale, feeble, emaciated woman—was as follows:—Her extremities, head, and trunk were in constant motion, save when she was asleep. Then the movements ceased entirely. The muscles of the face were affected. The arms were less involved than the other parts of the body. She could seize a large object and hold it for a second or two. The tongue could be protruded straight and held out steadily; but so severe were the general movements that the patient was quite unable to rest in bed or to sit on a chair. The only posture in which she could find partial relief was by kneeling on the floor and resting the upper portion of the body on some support. Her sleep was thus much interfered with, and, to add to her misery, a constant shooting pain in the inner and anterior aspects of the right thigh had tormented her for the last three or four months. The muscular power was diminished; her grasp was feeble, but that with the right hand was stronger than with the left. Power in the lower limbs was also markedly impaired. Sensation was everywhere normal save at the inner and anterior aspects of the right thigh, where it was increased. Knee reflex was present on both sides; no ankle clonus. The spine on inspection appeared normal; but, when percussed, pain was complained of over the seventh and eighth dorsal and also over the lumbar vertebræ; when a hot sponge was passed along the spine she felt it much more keenly at those spots. The action of the bladder and rectum was normal, as were also the special senses. The patient was irritable and childish in manner.

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[8] Pettenkofer's test afforded at once a beautiful reaction with this sample.

[9] These test-papers, the apparatus for taking the specific gravity, the standard opacity, suitable test-tubes, pipette, &c., as well as the peptone solution, are supplied by Messrs. Wilson and Son, Harrogate.

[10] The solution thus left at rest for a short time becomes quite transparent.

As many local and general remedies had been tried without effect, and as her general health was suffering sadly from the constant pain and want of rest, I offered her the chance of such relief as nerve-stretching, from what I had read of it, seemed to give. This chance she eagerly grasped at, and on March 31st, 1881, assisted by Mr. Page and Dr. Barnes, I stretched the right anterior crural nerve. The incision, an inch and a half long, was made half an inch to the outer side of the femoral vessels. The nerve was easily found, and, having been cleared from the surrounding parts, a blunt hook was gently passed under it. On this the nerve was raised sufficiently to allow of its being grasped between the thumb and forefinger, when it was twice pulled strongly from above downwards and from below upwards. The nerve was then replaced, the wound washed with carbolic lotion, the edges brought together with silver sutures, and a small horsehair drain inserted. When the patient recovered from the anæsthetic, she was absolutely free from pain and from the choreic movements; the latter did not return until the evening, some seven or eight hours after the operation. On subsequent examination, sensation in the parts supplied by the anterior crural nerve was discovered to be almost *nil*, especially as regarded pain. There was no power of flexing the thigh or raising the limb from the bed. April 1st: The patient had had a good night. Wound dressed, looking well; no pain. The choreic movements are exceedingly slight, those of the right leg not so marked as the left. Had "jumping" in the right limb during the night. Sensation on the right side much the same as yesterday. The right thigh felt somewhat warmer than the left.—2nd: Choreic movements not increased. Sensation and motor power somewhat better. Can feel the prick of a pin when inserted deeply.—4th: Sensation returning much more rapidly than motion. She can feel the touch of a finger placed on the anterior part of the thigh; perception, however, seems somewhat delayed when compared with the left. Pain is distinctly and rapidly felt. She can flex the thigh a very little to-day, but cannot raise the limb from the bed. The right thigh to the touch still feels warmer than the left. Sutures and drain removed. Wound healed, save in the line of the drain.—6th: Sensation seems equal on both sides. No apparent delay in the transmission of impressions. She can now flex the thigh more strongly and rapidly, and can raise it a few inches from the bed. Her general condition has much improved since the operation. She is more cheerful, and eats and sleeps well.—By April 25th the patient was able not only with slight assistance to walk about the ward, but she could sit easily in a chair, which she had not been able to do for many months. There had been absolutely no pain, and the motor power had increased; the right limb, however, was not so strong as the left.

When the patient was examined in February, 1883, nearly two years after the nerve-stretching, the chorea was found to be rather more severe than at the last report, though not nearly so much so as before the operation. She was still able to lie in bed or to sit upon a chair. Power in the right limb was found diminished, both in flexing the thigh and in pushing against obstacles. Her walking was also worse, and more support was required to be given. She had had no return of the pain. Fourteen months later she stated that the old pain had returned, and, though not nearly so severe as prior to the operation, her sleep was a good deal disturbed by it. The choreic movements appeared to be in much the same state as in February, 1883. Sensation was apparently equal in both thighs, and there was no delay in the transmission of impressions. When the spine was percussed the first and second lumbar vertebræ were found to be more tender than the others, and here also the hot sponge was more clearly felt. When measured two inches below the great trochanter, the right thigh was found to be 13½ in.; the left, at the same level, 14½ in. As the limbs were not measured before the operation, no importance can be attached to this difference in the circumference. The muscles of the right thigh seemed not only smaller, but felt softer than those of the left.

So far as I know, no case of chorea has been recorded in which nerve-stretching has been tried. Nor would one, considering the pathology of the disease, expect much good to follow such a procedure. Few, however, will doubt that in this case the operation, undertaken for another condition, was followed by marked improvement in the chorea. Three years had elapsed when I last saw the patient, and even then the benefit had not entirely passed away. Signs, however, were not wanting to show that the disease, though slowly, was steadily resuming its old characters.

Chesterfield.

IS ALCOHOL A FOOD?

BY T. W. THOMPSON, M.R.C.S.,

LATE SURGEON 1ST LIFE GUARDS.

IT is perhaps a little surprising that in this age of scientific energy a subject of such intrinsic importance and universal interest as the one I now propose to reopen should remain in the region of uncertainty. The importance of the subject becomes evident when we remember that the position occupied by alcohol in the civilised world, both as a staple article of diet and as a therapeutic agent, rests to a great extent on its supposed nutritive properties. The uncertainty with which the matter is still surrounded is sufficiently evidenced by the opposite opinions that continue to prevail, not alone among the general public, but even in the ranks of the scientific. These differences of opinion are often attributed to individual prejudice; I cannot but think, however, that, among the scientific at least, prejudice would ere this have succumbed to demonstration had this been forthcoming.

Without for a moment under-estimating the importance of the experimental researches of Anstie, Parkes, Dupré, Thudichum, and others, my contention is that, though the facts accumulated by those distinguished observers furnish a strong presumption in favour of the view that alcohol is a food, they nevertheless fall short of the requirements of proof. So much was admitted by Parkes himself, who said "the experimental evidence is incomplete (chiefly on account of the difficulty of collecting the amount given off by the lungs and skin)." In this sentence Parkes certainly points out the proximate cause of the failure of previous investigators to reduce the matter to demonstration, but as the difficulty of collecting all the alcohol given off by the lungs and skin (and we may add, bowels) amounts practically to an impossibility, I venture to suggest that the ultimate cause of their failure was that the logical arrangement of their experiments was unsuited to the peculiar conditions of the inquiry.

To explain my meaning more fully I must call attention to the plan upon which they proceeded, which was as follows:—Having administered a measured dose of alcohol to a subject, they endeavoured to collect the absolute amount eliminated by all the possible channels, with the view of comparing the amount administered with that eliminated, the difference between the two being assumed to represent the quantity that had been split up in the system and utilised as food. Now, if this method were practicable it could hardly fail to be conclusive; but, as already said, the difficulty of estimating the amount eliminated by the lungs, skin, and bowels with any degree of accuracy is, and probably always will be, insurmountable. This method, then, is never likely to furnish more than presumptive evidence, which must ever remain a prey to the criticisms of the sceptic. If we would reduce the matter to anything like demonstration, it would seem evident that we must resort to a different method.

I now propose an alternative line of investigation, which, in my opinion, is capable, if properly worked out, of yielding a positive result. The problem being to ascertain whether alcohol is or is not a food, we should endeavour to ascertain whether it is to any extent capable of taking the place of other foods. We cannot, unfortunately, proceed upon the simple plan of trying whether it is possible to sustain life for an indefinite period on a diet of alcohol alone, for since alcohol contains no nitrogen we know such a result to be impossible; it may, however, be a food nevertheless. The simplest and most conclusive method would seem to be the following:—

Ascertain, by a series of experiments arranged strictly in accordance with the Method of Difference, whether, of measured doses of alcohol administered, the amount eliminated is or is not influenced by the amount of other food taken. For instance, supposing alcohol to be a food, then, other things being equal, we should anticipate that the amount eliminated when the demand of the body for nourishment had already been amply supplied from other sources would be greater than when the reverse was the case, as in starvation. This difference would be observable equally by all the channels of elimination; it would, therefore, be sufficiently conclusive of the connexion of cause and effect if the elimination by any one channel was carefully studied under these different conditions. The difficult and uncertain channels might thus be neglected, and the more workable one (the urinary) adopted for observation.

To bring out still more prominently the connexion of cause and effect, this line of investigation might be pushed further by proceeding to the nicer distinctions exhibited by the Method of Concomitant Variations. If we could show that, other things being equal, of measured doses of alcohol administered, the amount eliminated by the kidneys always varied *proportionately* with the amount of other food taken, the fact of alcohol being capable of taking the place of some of the other nutritive elements would be established by all the weight of evidence that the inductive methods are capable of affording.

Acting upon the views above expressed, I have, in conjunction with Dr. G. A. Hamerton, worked out a few experiments, which I record below, and which, as far as they go, point unequivocally to the conclusion that alcohol is a food. I say as far as they go, because, inasmuch as they are of limited extent, and were performed under considerable practical difficulties, I should not wish to attach too much importance to them in the absence of corroboration. When I first entertained the idea of working out this subject I hoped to be able to carry it through, but I soon found that the time and facilities for experimentation afforded by a straggling country practice were altogether inadequate to the requirements of the inquiry. I have therefore been obliged to abandon the notion of working it out more thoroughly myself, and I have come to the conclusion that under the circumstances the best course is to put my view of the matter (with such experiments as we have already made) before the profession, feeling sure that if that view is a sound one it will certainly be worked out by others who are fortunate enough to be possessed of the required opportunities. I must, however, point out that, while admitting the possibility of our results being modified by more extended observations, I have no want of faith whatever in the method I have suggested, but hold confidently the opinion that, if carefully worked out, it must settle the question of the food value of alcohol one way or the other.

Coming next to our experiments, I may say first that, with the view of avoiding unnecessary sources of error, they were worked out only upon ourselves and one friend, in whom we have the greatest confidence. The test employed was the chromic acid colour test used for a similar purpose by Anstie, Thudichum, and Dupré, and all the precautions suggested by those distinguished observers were carefully adopted. For the information of those who may not be conversant with the *rationale* of this test, I should perhaps explain that it depends on the power of alcohol to reduce free chromic acid, when well diluted with sulphuric acid, into sulphate or oxide of chromium, which reaction is evidenced by a change of colour from red to green, the intensity of the change corresponding to the amount of alcohol present in the suspected fluid. Our general plan was as follows:—

Two experiments were to be made on the same individual. In Experiment 1 a demand for nourishment was to be created by exercise and starvation; in Experiment 2 the demand for nourishment was to be reduced to a minimum by rest and feeding. All the other circumstances were to be, as far as possible, identical in the two observations. On each occasion the same quantity of alcohol was to be taken, in the same doses and at the same hours. The relative amount of alcohol eliminated by the kidneys in the two cases was then to be compared. In anticipation of the possible criticism that in the first observation the skin elimination would be favoured by the exercise, I must point out that the first dose of alcohol was not taken till an hour after the exercise was completed, and that every precaution was taken to reduce the skin elimination to a minimum. Still, should this objection be seriously pressed, it would be easy, and perhaps more strictly in accordance with the Method of Difference, in any repetition of these experiments to vary the circumstance of food alone.

Experiment 1.—A. having abstained from alcohol for one week, the urine was examined on the evening of July 7th, 1884, and proved to be free from alcohol. The only food taken from 7 P.M. on the 7th till 9 A.M. on the 9th—an interval of thirty-eight hours—was, on July 8th, for breakfast, one egg, one small piece of toast (less than an ounce), and one cup of tea without sugar and milk; for lunch (1.30 P.M.), two ounces of beefsteak and one ounce of toast. On this day A. did an ordinary day's work, and, in addition, played two sets of tennis. At 7 P.M. he had a cold bath, put on cool comfortable clothes, and sat out of doors for the remainder of the evening. At 7.15 P.M. he passed urine, and at 7.30, feeling considerably exhausted, took the first dose of alcohol, which consisted of one-fourth part of a mixture consisting of an ounce and a half of Scotch whisky and two ounces and a half of water. The remaining three doses were taken at intervals of an hour. At eleven o'clock he retired to bed. All the urine passed between 7.15 P.M. on the 8th and 9 A.M. on the morning of the 9th was collected. Of this, 50 c.c. were put into a retort, with a little tannic acid to prevent frothing, and distilled to one-half through an air-tight Liebig's condenser into a receiver fitted with a mercurial valve. The distillate, to which was added a little caustic potash, was then redistilled. This second distillate was next distilled to one half with a little sulphuric acid. By these means the fluid was concentrated to one-eighth, and all the volatile alkalies and acids were removed. The final distillate was then put into a large test-tube which was connected by glass tubing on the one side to a continuously acting bellows, and on the other to a U-shaped tube containing a mixture of one part of dichromate of potash to three hundred parts of sulphuric acid. The U-shaped tube was again connected with a second test-tube containing the same acid mixture. Air was now pumped through the apparatus in a continuous stream for half an hour, and no change of colour occurred in the test solution either at the time or after standing.

Experiment 2.—After an interval of a fortnight, during which time A. had of course abstained from alcohol, the experiment already described was repeated on him, the only difference in the conditions being that on this occasion he ate as much and as often as he could, and exerted himself as little as possible. The whisky (out of the same bottle as before) was taken in the same doses and at the same hours, and the remaining details of the experiment were identical with those of the previous one. This time, when air was pumped through the urine distillate, a slight change of colour was soon observed in the test solution, which at the expiration of half an hour was of an evident greenish hue, which deepened after standing.

These two experiments were then repeated on B. and C., special care being taken to ensure that the conditions were identical with those of the previous experiments. In both of these cases the results obtained were exactly the same as those just described in connexion with A. While the subjects were creating a demand for nourishment by exercise and starvation there was no ascertainable elimination of alcohol by the kidneys. When, on the other hand, the demand for nourishment was reduced to a minimum by rest and feeding the elimination of alcohol by the kidneys was easily demonstrated, even after so small a dose as an ounce and a half of whisky, or probably about six drachms of absolute alcohol.

It will be seen that we only carried our experiments to the Method of Difference, and did not extend them in accordance with the Method of Concomitant Variations. The obvious reason was that, apart from want of time &c., a colour test is not sufficiently accurate for the nicer distinctions of the latter method, while the quantitative tests for alcohol are extremely difficult, and could hardly be worked out of a regular laboratory. Admitting that the case would be very much strengthened if corroborated by the Method of Concomitant Variations, I must at the same time express my belief that unless our results have been rendered fallacious by errors of practical manipulation, which I can hardly think probable, our experiments certainly indicate in the clearest manner that alcohol in small doses, at all events, is a source of nourishment—i.e., a food.

In conclusion, I must express my indebtedness to Dr. Hamerton for his valuable help in the practical working out of the experiments, without which, indeed, it would have been impossible for me, situated as I was, to have undertaken the inquiry at all.

Potter's Bar.

CASE OF

CARIES OF THE SPINE, WITH PARTIAL PARAPLEGIA, TREATED BY THE APPLICATION OF SAYRE'S JACKET;

RECOVERY OF POWER OF LOCOMOTION IN TWENTY-FOUR HOURS.

BY MARTIN OXLEY, M.D.,
CONSULTING PHYSICIAN TO THE LIVERPOOL INFIRMARY FOR CHILDREN.

MARY D——, aged ten years, came under notice on June 1st, 1883. There was disease of the fourth, fifth, and sixth dorsal, also last dorsal and first lumbar vertebræ, there being two distinct angular curves, the upper the more marked. She had been four months in the Aberystwith Infirmary under treatment. When discharged she had lost the use of her legs, and could not stand or walk. When seen by me she was unable to walk, although she could stand with assistance. She cried out suddenly with pain, caused by spasmodic jerking of her right leg. I applied a Sayre's jacket and a jury-mast while she was suspended, putting on extension enough to straighten the body, but without attempting to open out the two angular curves. The feet were flat on the ground, and she grasped the cross bar with her hands, an assistant giving her support and steadying her during the application of the jacket. She was then placed in bed. The next day, on my visiting her, I was told that she had been out of bed,[1] and had walked without difficulty. On hearing this I tested her walking powers, and found that they were quite restored. She went to her friends in Liverpool until November 10th, 1883, when she returned to have a new jacket. She was then in excellent health, and I exhibited her at a meeting of the Medical Institute. In June, 1884, she had a new jacket applied, and was able to walk about without any support. Now (April, 1885) the patient is again in Liverpool,[2] and has had a new jacket and jury-mast applied. She is able to go about quite comfortably without the support; but having seen bad results follow when the corset has been given up too soon, I intend to keep a light jacket on for some years.

Remarks.—The relation of this case will, I hope, convince those who doubt the efficacy of Sayre's mode of treating spinal caries—viz., by the application of a well-fitting plaster corset, which allows the patient at once to walk about and behave like a healthy individual. I consider the above as good an instance for testing Sayre's method as one could have. 1. The patient is old enough to speak for herself, and is highly intelligent. 2. She had previously been under treatment in hospital, under a skilful surgeon, by rest in the recumbent position. 3. She had disease of two separate portions of her spine—viz., the fourth, fifth, and sixth dorsal and the twelfth dorsal and first lumbar vertebræ. 4. She was unable to walk when she came under treatment. Further, a few days after the application of the jacket she was sent out into what we know too well as squalid Liverpool; and when she came to see me again, six months after the first application of the jacket, her dirty condition told very plainly how little care had been bestowed upon her.

Liverpool.

A NEW REMEDY IN GOUTY OBESITY AND DYSPEPSIA.

BY J. MORTIMER GRANVILLE, M.D.

I HAVE been obtaining some very good results of late in cases of gouty obesity and dyspepsia with a remedy which, although familiar and based on the simplest physiological principles, is, so far as I am aware, new as I use it. It occurred to me some time ago, as indicated by the physiological state in gout, chronic and irregular; and having now had ample opportunities of trying it, I venture to suggest it to practitioners generally, to whom I think it will at once commend itself as essentially *likely* to be of service.

One of the earliest, if not a primary, error of function in gout, whatever may be the real *cause* of that malady, is failure of the liver to secrete sufficient, or normally constituted, bile. The product of liver function is, as we know, excremento-recrementitial, the greater part of the bile being re-absorbed in the intestines; and among other uses in the economy, such as helping to hold the cholesterin, *and perhaps the uric acid*, in solution, it is destined to facilitate the proper digestion and assimilation of fats. If fat be not duly assimilated, it will be deposited crudely, as in the omentum and elsewhere, with the result of obesity, coupled with deficiency of heat production and maintenance; which is a very different thing from obesity with full or even excessive powers of calorification. I think it is important to make this discrimination between two distinct and totally different classes of cases. In the former class—common in persons with an inheritance of gout, in which there is obesity with a low grade of heat-force,—I am giving the biliary salts, extracted from ox bile, in the form of a pill, to be taken as pepsine is taken, with food. The results are very striking. The stools are rendered characteristically rich in bile without purging, the food is readily digested, and the accumulations of fat seem to melt slowly away. The taurocholate of soda with the glycocholate of soda are readily obtained from ox bile by evaporating to dryness and pulverising, making an alcoholic extract, filtering, and precipitating by small successive additions of ether. The deposit is non-crystallisable so far as the taurocholate of soda is concerned, while the glycocholate of soda appears, if the deposit be left to stand, in acicular crystals, forming themselves into rosettes. With any suitable excipient the mass may be readily made into pills, each containing about four grains of the taurocholate, and coated *so as not to dissolve in the stomach*. One should be given with each meal or immediately after food. The effect of this new remedy, both for defective digestion and assimilation, and for obesity in cases in which fat is accumulated instead of being burnt off in the system as nutritive fuel, will, I think, be found highly satisfactory.

Hanover-square, W.

AN INSTRUMENT FOR THE TRANSFUSION OF DEFIBRINATED BLOOD.[1]

BY T. W. CARMALT JONES.

THIS instrument is intended to be used for transfusing defibrinated blood. It could be equally well used for injecting milk or any other fluid into a vein. It consists of a holder (A), into which the defibrinated blood is to be poured; a tight-fitting metal cap (L), in the centre of which is a hole, a pipe leading from this hole communicates by means of an indiarubber tube with a valved handball (T). When the cap is in position on A, air can pass easily to A, but pressure on the handball will force air into A and compress it on the surface of the fluid in A. At the lower end of A is a piece of indiarubber tubing (B), which can be compressed by the clip D, and at the other end of the tubing is a hollow coned metal plug (C), which fits into the silver nozzle (M). The instrument with its accessories, as supplied in the case, provides all that is required for the performance of the operation of transfusion of defibrinated blood, with the exception of a clean ordinary tumbler, or, preferably, a small milk-jug and a basin of hot water. The steps of the operation are as follows. 1. Bleed the donor, in an adjoining room if possible, to five or six ounces into the measured vessel (H). 2. Whip the blood with the whip (P), and strain through the strainer into the tumbler or milk-jug. 3. See that the indiarubber tube (B), plug (C), and clip (D) are in place. Pour the defibrinated fluid into the holder (A), and put the cap (L) on firmly, then place the holder in the basin of water at 100° F. 4. Open a vein in the patient's arm, and insert the silver nozzle (M, K, or I)—three sizes of nozzles are provided—and block up the open end of the nozzle with the finger. 5. Have the holder brought to you; ease the clip until the fluid flows out of the plug, then tighten the clip again, take the finger away from the end of the nozzle, and insert the plug and remove the clip. Note the height of the fluid in A. The fluid in the holder is now in free and direct communication with the blood in the patient's vein. If any force is required, squeeze the handball gently. 6. After the operation is over again note the height of the fluid in A, remove the short piece of indiarubber tubing (B) and burn it. The other parts can then be easily and thoroughly cleaned.

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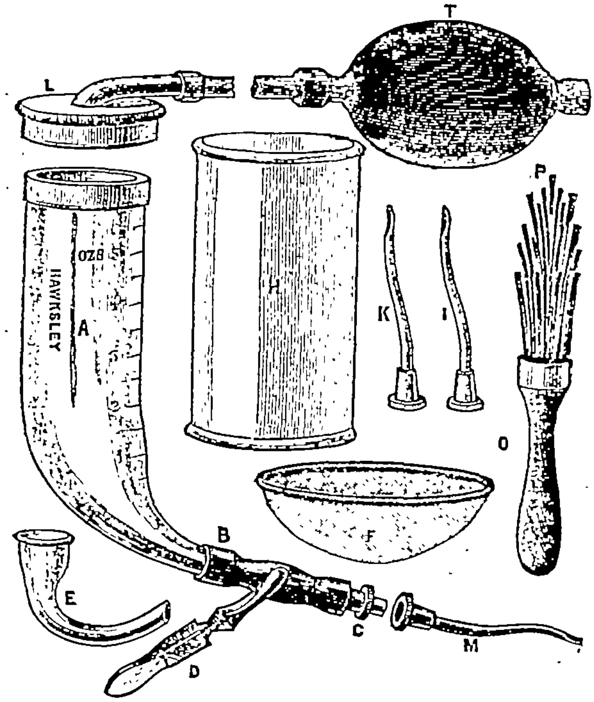
[1] This was contrary to my orders, as I always keep my Sayre's cases in bed between the blankets for three days after the application.

[2] I again showed her to the members of the Medical Institute at one of their meetings, this time without the jacket.

[1] A paper read before the Harveian Society of London, March 5th, 1885.

The instrument is very simple in action, has no delicate or complicated parts that can get out of order so as to cripple it, has no taps to puzzle the operator, and can be thoroughly cleaned and inspected. Supposing anything were to happen to the handball, an assistant could supply all the force required by blowing, though not so conveniently as by the handball. The piece of indiarubber tubing at B is to be a clean new piece each time the instrument is used, and is to be burnt directly after use, so that no danger may arise from dried blood not removed after previous use. The inside of indiarubber tubing is rough and not easily cleaned, and cannot be inspected to see if it is clean. This piece of tubing allows sufficient play and breaks the rigidity, but is purposely kept short. The amount of blood taken from the donor and the exact amount injected into the patient will be known. The instrument is made for me by Mr. Hawksley of Oxford-street, to whom I am indebted for several practical suggestions.



H, Vessel marked in ounces for donor to be bled into. P, Whip to be used in H. F, Strainer of lawn muslin on wire frame. A, Holder to receive defibrinated fluid. B, Indiarubber tube about three inches long. C, Coned plug (hollow). D, Clip. L, Metal cap for A. T, Handball. M, Nozzle. K, I, Additional nozzles. E, Blood director.

ANTHROPOLOGICAL INSTITUTE.—At a meeting held on April 14th (Professor Flower, F.R.S., Vice-President in the chair), Dr. J. G. Garson read a paper on the "Inhabitants of Tierra del Fuego." Three tribes inhabit the Archipelago of Tierra del Fuego: they are called the Onas, who occupy the north and east shores, and resemble the Patagonians in being a tall race, chiefly living by hunting, but supplementing their food with shellfish and other marine animals; the Yahgans, who live on the shores of the Beagle Channel and Southern Islands—a short, stunted race, subsisting almost entirely on the products of the sea and birds; the Alaculoofs, who dwell in the Western Islands, and are closely similar to the Yahgans. These last two tribes lead a very degraded life, wandering from place to place; they possess no houses, but construct shelters out of the branches of trees; they build canoes of bark, and wear very little clothing. In stature they are short, the men averaging about 5 ft. 3 in., and the women about 5 ft. In cranial and osseous development they resemble the other wild native tribes of America, but by isolation have assumed certain characters peculiar to themselves. The population of the Fuegoan Islands appears to be about 3000.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

MIDDLESEX HOSPITAL.

THE following two cases of hernia are of considerable interest. In the first, where hæmorrhage from a deeply-seated vessel complicated the operation for strangulated femoral hernia, we have an example of a condition which is very uncommon, and which, when it does occur, is usually due to an abnormal position of the obturator artery, the hæmorrhage arising from a wound of which is apt to be very troublesome. The second case is one in which the removal of the sac was carried out as an essential part of the treatment, and Mr. Hulke pointed out to his class the importance of closing the peritoneal cavity, and so preventing drainage backwards of discharges from the wound into the abdomen, a frequent cause of fatal peritonitis.

For the reports of the cases we are indebted to Mr. Ernest E. King, house-surgeon.

STRANGULATED FEMORAL HERNIA; OPERATION; RECOVERY.

(Under the care of Mr. J. W. HULKE.)

M. R—, aged forty-five, a washerwoman, was admitted on Jan. 29th, 1885, complaining of swelling in the upper part of the right thigh, accompanied with pain in the abdomen and retching. The patient states she has had a swelling in the right thigh since her last confinement, eight years ago, but it has never given her any inconvenience, and she has never worn a truss. Five days ago she got a "chill" and began retching, and, the retching continuing, she noticed the swelling in her thigh was larger than usual, and somewhat tender. Thirty hours before admission the symptoms became aggravated; bowels not open for three days. She describes the vomited matter as "clear, watery, and frothy."

The patient's state on admission was as follows. In the upper part of the right thigh, external to and below the spine of the pubes, was a swelling about four inches long by two and a half wide, its long axis being from below upwards and outwards. On palpation the swelling was fluctuating, and a thrill of fluid could be distinctly felt. The lower border was much better defined than the other. It extended beyond Poupart's ligament, and was superficial to it. No impulse on coughing; dull on percussion, except on a very small area close to the spine of the pubis. It was irreducible. She had also an umbilical hernia. The disease was diagnosed to be strangulated femoral hernia, probably both gut and omentum.

☞Two hours after admission the patient was placed under ether, and an incision was made over the inner border of the swelling until the sac was reached. On opening the sac a large quantity of bloody serous fluid escaped (roughly estimated at two ounces). The finger was then passed in, and the gut was found to be surrounded by adherent omentum in places; consequently the wound was enlarged upwards and downwards; one or two vessels were divided, but easily controlled. The finger was then passed to Gimbernat's ligament, which was divided. As the hernia was still irreducible, the omentum was isolated as far as possible, and the pedicle transfixed with an aneurysm needle and double ligature, and the omentum carefully snipped away with scissors. There was no further hæmorrhage at this stage. The gut was then returned, and two or three little oozing points ligatured. After they had been stopped it was noticed that there was still bleeding from the bottom of the wound, and a ligature was passed with an aneurysm needle beneath it and tied, and the hæmorrhage being apparently checked, the closing of the wound was proceeded with; but again blood welled up, and the wound was freely opened and large retractors introduced, and at once a comparatively large atheromatous artery was seen spouting away freely. From its position it was evident that this was a large communicating artery between the deep epigastric and the obturator, lying just behind Gimbernat's ligament; it gave very great difficulty in securing, which was only accomplished by making a still freer incision and picking up both ends and tying. The wound was then washed with a strong solution of chloride of zinc, dusted with iodoform, a long drainage-tube inserted, closed with sutures, and dressed with antiseptic gauze. The portion of omentum removed, when spread out, was as large as the palm of the hand.

Jan. 30th.—The patient passed a fairly good night, although troubled by cough at times, which was treated with an occasional dose of linctus morphiæ. She had some little pain in the wound, and took three half-grain opium pills during the night and a little milk and lime-water.—9 A.M.: Pulse 104; temperature 101·4°. Some slight abdominal tenderness.—2 P.M.: Wound dressed; looking well; a little blood-coloured inodorous discharge.

31st.—9 A.M.: Pulse 96; temperature 100·2°; the temperature during the night had reached 102·2°; has a little bronchial catarrh. Ordered an ounce of compound draught of senega every four hours. Wound again dressed; looking well, but had some slight tenderness over abdomen.

Feb. 2nd.—9 A.M.: Pulse 100; temperature 100·8°.

3rd.—Pulse 100; temperature 100°. From this date the patient improved, the wound granulating well. The drainage-tubes were removed, and on March 17th she was walking about the ward wearing a truss and in good health.

STRANGULATED UMBILICAL HERNIA; OPERATION; REMOVAL OF THE SAC AFTER LIGATURE OF THE NECK; RECOVERY.

(*Under the care of* Mr. J. W. HULKE.)

E. O——, a man aged sixty-one years, was admitted at 9 P.M. on March 3rd, 1885, complaining of some vomiting and constipation, and a large swelling about the umbilicus. He stated that for five years he had suffered from hernia, but that he could always reduce it easily; for the last two years he had worn a belt, and there had always been more or less swelling. On March 1st, without any apparent cause, he experienced pain in the abdomen, and noticed that the swelling was larger; he vomited after taking any food. On the 2nd he placed himself under medical treatment. Ice was tried, and an attempt at reduction made, but this failed, and, the vomiting and constipation continuing, he was advised to come to the hospital; but twelve hours previous to admission he took a large dose of castor oil and fomented the rupture on his own responsibility. This failing to act, he sought admission.

On admission there was a large swelling about the size of the clenched fist in the umbilical region. Its upper surface was almost entirely denuded of epithelium from the application of poultices, ice, &c. On palpation the swelling was found to extend some distance beneath the skin, more than was apparent to the eye. It was very hard, gave no impulse on coughing, was irreducible, but only very slightly tender on manipulation. It was diagnosed to be strangulated umbilical hernia.

Mr. Hulke, being in the hospital, decided to place the patient under ether at once, and if taxis failed—which it did—to operate at once. The parts were first washed out with carbolic solution, and iodoform dusted into the umbilicus. A semicircular incision was made at the upper and left outer margin of the swelling, with the intention of dissecting down to the constriction, and reducing, if possible, without opening the sac; but after carrying the dissection down a considerable distance, it was found impossible to do this, and another incision was made, running outwards and upwards from the centre of the umbilicus, and cutting the previous one at right angles. The strictures were then very carefully divided until a deep red and congested tissue, which looked and felt exactly like the bowel, came into view, but the finger could not be passed round the swelling; and the incision was further increased by two diverging ones, and then beneath this thickened membrane a bubble of air and fluid could be seen, showing evidently that this was the sac, and it was consequently picked up and pricked, and a large quantity of blood-coloured watery fluid escaped, showing the sac had been opened. It was freely divided, and a large piece of omentum deeply congested came into view; this was pulled forward, and numerous double ligatures passed through and firmly tied; the mass was then cut away (it weighed twelve ounces). The finger was next passed down to the constriction, which was found to be very tight and fibrous, and was divided with a hernia knife; a few bleeding points were ligatured. The whole surface was then thoroughly washed with carbolic solution (1 in 20), and there being no bleeding whatever, the stump was pocketed. The sac was next dealt with, and was found to be adherent nearly throughout its entire outer surface to the abdominal wall; it was freed by stripping it away, pulled well forwards, and the finger introduced to its own base inside; a ligature was tied round at this point as the finger was withdrawn, and the upper portion entirely cut away. Drainage-tubes were inserted, the edges of the wound brought together with waxed silk sutures, iodoform dusted over, and gauze dressing and a binder applied. The operation lasted one hour and a quarter. Temperature at 12 (midnight) 97°; pulse 84.

March 4th.—9 A.M.: Pulse 90; temperature 96°. The patient has not been sick; expresses himself as feeling quite comfortable. Has had a few teaspoonfuls of wine, water, and milk. Fifteen ounces of urine were drawn off; sp. gr. 1025, acid, no albumen.—3 P.M.: Bowels acted, a copious semi-solid motion being passed.—8 P.M.: Bowels acted again.

5th.—12.30 A.M.: Pulse 96; temperature 99° in mouth. He complains of great thirst; liquids increased, and to take a little barley-water as well.—8.30 P.M.: Temperature 98·8°. Slept several hours. Pulse 100. He has some bronchial catarrh, probably due to ether. Ordered steam inhalations.

6th.—Wound dressed. Total absence of inflammatory swelling; slight serous, inodorous discharge; no tenderness. Evening temperature 100°.

15th.—The patient since last note has steadily improved; temperature normal; pulse 84; bowels acted well, and wound granulating freely. Drainage-tubes have been considerably shortened, and the patient is sitting up in bed, going on remarkably well.

CITY OF LONDON INFIRMARY.

CARCINOMA OF THE LIVER WITH GREAT CONTRACTION OF THE STOMACH, PRODUCING NO SYMPTOMS; NECROPSY; REMARKS.

(Under the care of Mr. W. GEM.)

GEORGE K——, aged fifty-six, a porter, was admitted into the infirmary on October 29th, 1884, suffering from fistula in ano. His condition on admission was pale and anæmic, with great debility and weakness, although no emaciation was apparent; there was a rather copious discharge from the fistula, which was situated an inch and a half up the bowel. He had faint dulness on deep percussion over the left apex of the lung, but no complaint as regards the abdomen, which was enlarged. The liver dulness somewhat exceeded the normal, and was slightly irregular on the surface, but with no pain or uneasiness. He had a little diarrhœa, which was soon stopped by an astringent mixture. He was placed on a nutritious diet and got slightly better of the discharge and debility, but still complained of lassitude. Operation on the fistula was deferred until his condition became more favourable. Not having improved after being under treatment for a month, he was again thoroughly examined, and on percussion over the liver complained of pain over the right hypochondrium, with irregular masses slightly increased. All through there was no vomiting or jaundice. The bowels again became free, but were stopped by lead and opium pills. His history, by the way, indicated no hereditary cancer; he was of temperate and regular habits, and had always done his work as a porter without any feeling of illness except the fistula, which troubled him at times. About a month before his death he complained of pain over the right hypochondriac region, increasing slightly, but not to any extent, and a sense of weight and fulness over the epigastrum, but still no vomiting or jaundice occurred. It was only a few days before death that he showed the unmistakable cachexia of cancer, and emaciation became very great, though he still took his food up to the last, without any trouble or vomiting. He gradually got worse, and sank on January 14th last.

The autopsy was made twenty-four hours after death, and revealed the following. The liver appeared double the size of normal in outline, weighed nine pounds, was nodulated on the surface, with flat tuberous masses of cancer of the encephaloid type, and was soft in consistence. The gall-bladder was normal in appearance, and contained four drachms of bile. There was, of course, great displacement of the neighbouring viscera. The stomach was contracted so as to be a mere tube of half an inch in diameter. The kidneys were slightly atrophied and granular. The left apex of the lung contained some tuberculous masses. The heart was normal, likewise the other organs and viscera. The abdominal cavity contained a small amount of bile-stained fluid; the fistula was slightly cartilaginous half an inch above the anus, and there was a small cancerous nodule of the head of the pancreas of the same type as the liver.

Remarks by Mr. Gem.—The above is interesting inasmuch as cancer of the liver usually gives rise to pain, jaundice, and gastric disturbance, or symptoms of various import, which were conspicuous by their absence here, and usually causing a patient to seek relief before they have caused such great destruction and reached such a stage as in this case. There were nominally no symptoms suggestive of cancer until two or three weeks before death, although it was suspected all through, and no jaundice or vomiting, although the stomach was so contracted and the liver substance so destroyed. The case also shows that it is not incompatible with life for the organs to be in this state. The query arises, How were the functions of the liver and stomach carried on under such conditions?

LEICESTER INFIRMARY AND FEVER-HOUSE.

ACUTE HYDROCELE; PLEURISY AND PERICARDITIS; DEATH; NECROPSY; REMARKS.

For the following case we are indebted to Mr. C. J. Bond, house-surgeon.

George W——, aged sixty-five, a hedge-cutter, first felt sharp pain in the right tunica vaginalis five days before admission; this was followed in a few hours by rapid swelling, so sudden indeed that the patient thought he was ruptured. Two days later he complained of pain in his chest, with some shortness of breath, and gave up work. On his admission, three days later, there were loud friction-sounds over both sides of the chest, with signs of consolidation of the lower part of the left lung. The right tunica vaginalis was distended with fluid, and very tender. No enlargement of the testicle could be detected. The patient died three days later from the pneumonia and rapid pericarditis.

At the autopsy both pleuræ were found covered with thick layers of recent lymph, but containing very little fluid. The left lung showed consolidation of the lower lobe in the stage of red, passing in parts into that of grey, hepatisation. The pericardium contained two ounces of semi-turbid serum, and both surfaces were covered with recent lymph. The right tunica vaginalis contained about two ounces of clear serum, and the surfaces were coated with a layer of recent lymph, a quarter of an inch thick, and having the same naked-eye characters as that on the pleuræ—tough, white, and adherent. The testicle itself was neither swollen nor altered in colour or consistence, and the cord appeared normal. The other organs were healthy, as were also the serous membranes of the peritoneum and arachnoid, and the synovial membranes.

In this case a healthy man (his only previous illness had been an attack of rheumatism one year previously) suddenly suffered, without any blow, inflammation of the testicle, or apparent exciting cause, from a rapid and acute inflammation of the right tunica vaginalis. In forty-eight hours the pleuræ had commenced to take on inflammation of a like nature, and in eight days from the onset of the symptoms the man died from acute pericarditis. No record can be found of inflammation of the tunica vaginalis arising thus in cases of this kind; neither Bransby Cooper, Velpeau, nor Syme mention it in their comprehensive lectures on the subject in the years 1852, 1854, and 1855; so that it would seem to be a rare complication, and the etiology and exact pathology of the hydrocele in this case seems obscure. We are of course familiar with the ordinary hydroceles of children and adults, with the hydrocele arising after inflammation or disease of the testis called by Velpeau acute, but really secondary, and the cases of hydrocele following injury without the testicular implication. But in this case there was a general inflammation of the serous membranes of the body, and in this inflammation the tunica vaginalis takes part. The naked-eye characters, too, of the products of the inflammation, the thick white lymph, and the scanty, almost clear, fluid are alike. Moreover, the somewhat large round organisms described by Friedländer as characteristic of pneumonia were found not only in the pneumonic lung, but also in the pleural fluid, and, what is noteworthy, in that of the hydrocele. Are we, then, to regard the inflammation of the tunica vaginalis as a part of the general inflammation having a common cause with it, a view rendered probable by the absence of any other cause, by similarity of appearance, and the presence of the organisms? If so, in what relation does the pneumonia stand to this inflammation? Was it really the primary affection, and the others secondary, due to an escape, as it were, of the organism? But, supposing this view of the hydrocele to be correct, is it not strange that, with so many cases of pleurisy, the tunica vaginalis is so rarely, in fact never, affected. It might be supposed that the man was suffering from some form of septic poisoning, and that the hydrocele was really a secondary process or pyæmic abscess; but this is unlikely, because there were no symptoms of septicæmia, the temperature was the continuously high temperature of pneumonia, there were no rigors, and especially because the fluid in all the cavities was clear serum, and the lymph white and tough, quite unlike the appearance of any septically-inflamed serous membrane or pyæmic abscess.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Displacement of Lumbar Vertebræ.—Cerebral Arteries in States of Congestion.—Hypospadias.—Destructive Disease of the Lung.—Acute Ulceration of Colon.—Cyst growing from the Wall of the Intestine.—Cases of Gastrostomy.

An ordinary meeting of this Society took place on Tuesday last, Dr. J. S. Bristowe, F.R.S., President, in the chair. The number of card specimens exhibited was very large.

Mr. Arbuthnot Lane read a paper on the Modifications which the Lumbo-sacral Articulation undergo as the result of transmission of superjacent weights through it to the pelvis in labourers. He found that the changes varied within broad limits, having at one extreme those cases in which the centre of pressure fell behind the body of the fifth lumbar vertebra; in the other extreme the centre of pressure fell somewhat in front of the body of the last lumbar vertebra, so that there was a marked tendency to forward displacement of it, which was opposed by the articular processes of the vertebra. In this case the spinous processes did not share as they did in the first set of cases in supporting or transmitting the weight to those of the sacrum, which were proportionately to the bodies but slightly developed. Mr. Lane has now found two remarkable modifications of the lower part of the spinal column resulting from pressure. The first of these presented most of the changes characteristic of the first group referred to above. The spinous processes and laminæ of the sacrum were enormously enlarged and were very dense. The bodies were small and cancellous in structure. The body of the fifth lumbar vertebra was displaced backwards, producing a condition diametrically opposite to that called spondylolisthesis. The second specimen, although appearing to belong to the second class of pressure changes, was perceived on vertical median section to belong to the first class. The subject from whom it was taken was a man who had carried heavy burdens on the left shoulder, back, and neck. The lumbar spine was very convex and presented the appearance of spondylolisthesis. On section the last fibro-cartilage was seen to be increased in depth, so that the weight had been transmitted to the sacrum chiefly through the spinous and articular processes, which were very much thickened and increased in strength. The sacrum had yielded transversely about its centre, the upper part going forwards and downwards, so much so that if the plane of the upper surface of the sacrum were continued forward it would pass one inch below the lower margin of the symphysis. The diameters between the angle of the sacrum and the upper and lower margins of the symphysis were three inches and a half. The spinous processes of the sacrum were much enlarged, as were the laminæ. The sacrum had during the later period of life been acted upon by an upward pressure, probably due to a continuous sedentary position. This position had served to increase the anterior concavity of the sacrum still further.

Dr. Handfield Jones showed specimens of Cerebral

Vessels in states of Congestion. Some of the specimens were taken from cases of meningo-cerebritis, but others came from subjects who died from no special disease. He described capillaries obstructed by large leucocytes which were not nuclei of the capillary wall, for they were more numerous and rounded, and changed shape under pressure and stained better than these. The leucocytes probably collected during the last hours of life, and this appearance was well seen in a specimen of omentum; the red corpuscles were not to be seen in the area of aggregated leucocytes. He also described specimens in which there were many more and bulkier corpuscles than those above referred to. Growth of pre-existing cells or accumulation of white corpuscles might explain the appearances. In some specimens cells $\frac{1}{2000}$th of an inch long were to be seen elongated, with their long diameter placed parallel to, across, or obliquely with the vessel; some were free in the channel of the vessel; these might occur in large groups. He did not think that they were endothelial particles, but looked on them as proliferating muscular nuclei. Other corpuscles which appeared to be quitting small arteries, capillaries, and veins were described, and the amœboid qualities of corpuscles were referred to as having been manifested in tissues outside the vessels of the pia mater. Again, rounded or short ovoid corpuscles which were probably overgrowths of portions of muscle nuclei were described. Dr. Jones thought we should distinguish between the muscle fibre and the muscle nuclei; the former may disappear whilst the latter hypertrophy. He then made some remarks on these states of corpusculation, and gave the different views which might be held to explain the occurrence of masses of similar corpuscles. In some of the specimens the capillary walls were sometimes very indistinct. These changes could be witnessed in inflamed areas, where the capillaries appeared fluffy and granulous at times. It seemed as though the vessels were converted into soft granulous matter. Mention was made of small films of unstained protoplasm which could be detected in the neighbourhood of the vessels. Other appearances of a wide meshed plexus of fibrin were described as to be seen in arteries and veins of the cerebral tissues. He considered that many of the appearances were best explained as overgrowths of muscle nuclei with detachment and escape owing to denudation of the vessel wall. There might be a formation and accumulation of corpuscles within the vessels as well as overgrowth of corpuscles. These changes had been met with in cases of meningitis and typhoid fever and other states of cerebral congestion, but they were not necessarily morbid, as they might be found in subjects dead from any cause.

Dr. WILLCOCKS exhibited a specimen of Hypospadias in a seven months' child. The sex of the child was supposed at first to be feminine, and she was christened "Rebecca." There was a slight depression, which was a sort of a rudiment of a vagina, situate between the urethra and the anus. Nodules, which were obviously testes, were felt in the apparent labia. Mr. Symonds drew back the central preputial fold and exposed a minute glans penis. The penis gradually increased in size. The patient died at the age of ten months from the sequelæ of measles. At the autopsy, the male organs of generation were readily recognised, and there was no uterus or vagina. The left obliterated hypogastric artery could not be found. This was a case of mistaken sex. Another was mentioned as having been under Mr. E. Owen's care at the Hospital for Sick Children, Great Ormond-street; this child up to the age of sixteen months was regarded as a girl. Another case of Dr. George Buchanan's was referred to.—Mr. R. J. GODLEE said that he had seen an almost similar case at the North-Eastern Hospital, but there were no testicles on the apparent labia, and there did appear to be a rudimentary vagina.—Mr. J. H. MORGAN had seen cases of the kind under discussion. Sometimes the external organs were those of the female and the internal organs those of the male. Otto had described in the sheep a case of genuine combination of male and female parts, but he was uncertain whether this mixture had ever been observed in man.—Dr. WILKS believed John Hunter had pointed out that when the testes did not descend the physical frame had a feminine configuration.—Dr. BRISTOWE narrated the case of a supposed Welshwoman who became a nurse at St. Thomas's Hospital. She had a beard and moustache, and walked and talked like a man; the parts concerned were preserved in St. Thomas's museum. He doubted whether any genuine combination of sexes ever existed.

Dr. PERCY KIDD exhibited two specimens of Destructive Disease of the Lung from Obstruction of the Main Bronchus, and gave the following history of the patients. In Case 1, a man, aged thirty-eight, who had had syphilis twenty-three years previously, came into the hospital with signs of aneurysm of the aorta and consolidation and excavation of the left lung; the left radial pulse was smaller than the right. He had a paroxysmal cough, and expectorated nummular purulent sputum. His left arm was noticed to become œdematous. At the post-mortem examination a large aneurysm was found involving the descending aorta and compressing the left bronchus and, to some extent, the trachea. The aneurysm was very thin-walled, and contained a small thrombus at the posterior aspect, where it was attached to the spine. The right lung was healthy. The left lung was large and of equal size with the right, riddled throughout with cavities situated in pigmented fibroid tissue, and intersected by numerous bands of a similar tissue. The cavities had a bronchiectatic appearance in some instances, and all contained reddish puriform liquid and some soft caseous material. The liver, spleen, and intestine were slightly amyloid. In Case 2, a married woman, aged twenty-five, had cough, pain in the chest, dyspnœa, night sweats, and wasting; she had no kind of sore-throat or skin eruption; her fingers were clubbed; there was a large circular ulcer on the left thigh, with scarring and pigmentation over the leg. The left chest was dull and almost motionless, vocal fremitus weak, and bronchial breathing and pectoriloquy were noted. There was a paroxysmal cough, and the sputa were nummular. Puncture gave a negative result. She died from albuminuria and general dropsy. At the autopsy there was extensive scarring of the trachea involving the left bronchus, which was much constricted. The left lung was riddled throughout with trabeculated cavities, separated by fibroid lung; the lung was bronchiectatic in some parts. The contents of the cavities consisted of a reddish fluid and some putty-like material. There was recent tuberculosis in the other lung. The other viscera showed amyloid changes. In both cases the sputum was examined for tubercle bacilli without success. He referred to Dr. Pearson Irvine's cases, and thought the specimens shown supported the views put forward by that gentleman, that the breaking down of the lung was due to the pressure on the bronchus, and stagnation of air and secretion in the bronchi.—Dr. CREIGHTON inquired for a history of syphilis in either case, and suggested this agency as a cause of the pulmonary disease.—Dr. GOODHART spoke of the ulceration of the bronchus at the seat of pressure. He thought there were stages in the disease of the lung from fibrous and solid down to caseation and destruction. He suggested that the presence of ulceration might have led to some infection of the pulmonary tissues.—Dr. EWART said that in cases of collapsed lung as the result of pressure on a bronchus he had found no trace of ulceration. Causes might act from within and produce destruction, for inside the air-tubes there might be retention of secretion followed by decomposition and ulterior changes.—Dr. F. SEMON said that Pearson Irvine, as well as he himself, had always found ulceration of the bronchus opposite the seat of pressure of an aneurysm.—Dr. EWART said that was true, but he referred to ulceration from pressure of the pulmonary tissues, and thought that Dr. Goodhart spoke of these tissues, but the last-named gentleman said that he had spoken of the bronchus.—Mr. GODLEE asked whether there was any analogy between the changes and those observed after "cut throat" where it was probable that the accumulation of secretions was the efficient cause of the pulmonary disease.—Dr. HALE WHITE considered that the amount of pressure on the bronchus might explain the differences observed in different cases.—Dr. BRISTOWE did not feel certain that the destructive changes were not antecedent conditions to the pressure on the bronchus. In a case of meningitis in an adult supposed to be tubercular there were signs of cavities in one lung; the autopsy showed no tubercle, but the cavities in the lungs, smooth lined as they were, had no doubt originated early in life. Again we must be sure that no pressure existed on the vessels before attributing the destructive changes to pressure simply on the bronchial tubes for these might communicate later on with cavities formed as the result of vascular obstruction.—Dr. PERCY KIDD, in reply, said that the aneurysm was probably of four years' duration in the first case, and the stricture had lasted one year and a half in the second case. Pressure on the vessels could not be excluded in the first case, but could be in the second. He did not think there was primary syphilitic disease of the lung though, as he had stated, syphilis was mentioned in the history of each case. The mechanical effects of obstruction of the tubes he believed should be charged with the chief part of the causation; there was no collapse of the lung in either case.

Dr. ALLCHIN showed a specimen of Acute Ulceration of the Colon. The patient was a middle-aged woman, admitted into Westminster Hospital on Jan. 4th. 1885, where she died eleven days later. She had been married nine years, and had had five children; had worked hard as an ironer. She had suffered much from constipation, and had passed blood occasionally. Acute symptoms began on Dec. 27th, 1884, about six weeks after confinement; there were pains and diarrhœa of distressing character. On admission she looked very ill and was emaciated. There was a white furred moist tongue. The pulse was 112, soft and dicrotous; the temperature was 101°. There was total suppression of urine, with anorexia and thirst. The pulse gradually became more rapid, and the excessive diarrhœa continued; the temperature varied between 99° and 102°. There was much pain and tenderness about the colon and some tympanites; the urine was not albuminous. The motions varied much in appearance; the colour of them was grey and yellow, and mixed with blood, and sometimes they looked like dark fluid blood, but small globules of mucus were always present. At the necropsy, made twenty-six hours after death, Dr. Allchin found the colon to be the only part diseased; it was slightly congested externally, but there was no peritonitis. There were numerous large ulcers with their long diameters transverse to the axis of the bowel; they had a clean base which was not thickened; the edges were thick and vascular, and in places undermined. The ulcers varied in size from an inch and a quarter to one line in length, and were extensively distributed over the large intestine. The subjacent muscular tissue was laid bare in many of them. No dilatation or hypertrophy of the intestine existed. The case belonged to that class which had been described as "follicular ulceration of the colon." Reference was made to many points of clinical and pathological importance. The symptoms may be very slight in such cases, and the only symptom present may be great irregularity of the bowels. He considered that the cases were not quite like those of acute dysentery. The question as to why the solitary glands were the primary seat of inflammation was broached; as the same structures exist in the small intestine, it is difficult to see why they should not be affected also.—Dr. WILKS made reference to the medico-legal aspect of such cases, and said that Dr. Copeland and others had expressed the opinion that such cases could not occur in this country, and so, when such changes were seen, an irritant poisoning would be diagnosed. He did not share that opinion.

Mr. BATTLE exhibited a Cyst removed from the wall of the Small Intestine. The patient was a married woman, aged thirty-five. Eight years before admission to St. Thomas's Hospital under the care of Dr. Bristowe she had had an attack of jaundice, accompanied by ascites and swelling of the legs; the jaundice disappeared in two years, but the dropsy endured five or six years. The swelling of the left side of the abdomen was observed when the dropsy subsided. She had suffered for eight years from periodical bilious attacks. The tumour was tender at the menstrual periods. The patient was anæmic and well nourished. There was a rounded swelling in the left hypochondrium, immediately below the costal arch, the size of a large egg, movable, but not with respiration; it was tender and painful. In the hypogastrium was another swelling, hard, also tender and somewhat movable, smooth, and extending from the left side of the middle line into the right iliac fossa. Three months after admission Mr. Sydney Jones removed the cyst by abdominal section; it was found to be attached to the small intestine, being sessile, and occupying a considerable section of the intestinal wall, to which it was firmly attached, and from which it was carefully peeled. A few vessels required ligature, but the thermo-cautery was required to arrest the general oozing from the intestine. There was a varicose and dilated condition of the lymphatics on the surface of the intestinal folds. The pelvic tumour was a uterine fibroid. The operation was performed antiseptically, and the patient made a good recovery, leaving the hospital thirty-seven days later free from pain and in improved health. The tumour was smooth on the surface and the size of a small orange, white and glistening. It had a laminated wall, but there was no evidence of glandular structure nor of epithelial lining. The fluid was thick and looked like yellow paint. Cholesterine crystals, fat, and molecular matter were found by the microscope, and fat and albumen by chemical examination. —Dr. BRISTOWE did not think it was a hydatid tumour.

Mr. BRUCE CLARK showed two specimens removed from two cases of Gastrostomy. In one case the obstruction was situate low down at the cardiac end of the œsophagus, and in the other it was situate high up in the gullet. A successful operation had been performed in both. In the first case the stricture was pervious and the stomach was not contracted. This contrasted with the other case, where the stomach was greatly contracted and the stricture was impervious. In the latter case bile was discharged from the gastrostoma. This proved to be due to the opening having been made to the duodenal side of the pyloric orifice; the incision was made well to the left of the rectus, but the contraction of the stomach no doubt caused the awkward position of the opening. One patient lived seven weeks and the other six weeks; both died from asthenia.

The following card specimens were shown:—Mr. Godlee: a recent specimen of Acute Necrosis with Pericarditis and Large Patches of Softening of the Left Ventricle. Dr. Norman Dalton: Multiple Angiomata of the Liver. Dr. C. Turner: (1) Tumours in Adrenals; (2) Suppuration of Simple Fracture of the Hyoid Bone. Dr. Silcock: Enterocolitis. Dr. Goodhart: Specimens of Enteritis and Colitis. Mr. J. Hutchinson, jun.: Hydrocele of the Cord. Dr. Hebb: Aortic Valvulitis with Embolism of a Coronary artery and Middle Cerebral Artery. Mr. Shattock: Fracture of Superior Cornua of Thyroid Cartilage. Dr. Chaffey: Solitary Kidney (congenital). Dr. Hale White: (1) Enormous Hypertrophy of Heart; (2) Large Triple Phosphate Renal Calculus. Dr. G. N. Pitt: Syphilitic Ulceration of Larynx and Trachea. Dr. Hadden: (1) Broad Ligament Cyst containing Coagulated Albumen; (2) Ulceration of Intestine originating in hæmorrhage. The patient was leucocythæmic.

MEDICAL SOCIETY OF LONDON.

Treatment of Gangrenous Intestine in Strangulated Hernia.

AN ordinary meeting of this Society was held on Monday last, Dr. W. Miller Ord, F.R.C.P., President, in the chair. A well sustained discussion followed the reading of the paper.

Mr. MITCHELL BANKS read a paper on the Treatment of Gangrenous Intestine in Strangulated Hernia. The author dealt with two main propositions. The first was the consideration of the question whether the surgeon should leave the gangrenous gut where it was, merely incising it and awaiting the formation of an artificial anus. The second was the consideration of the question of excision of the sloughing bowel and restoring the continuity of the intestine. A case illustrative of this second method of procedure was narrated. On Nov. 7th, 1883, a cook on board ship, aged twenty-five, was admitted into the Liverpool Royal Infirmary for strangulated inguinal hernia of the right side, which came on three days before as the result of exertion; the strangulated bowel could not be returned, and when admitted all the symptoms of strangulation were well marked. Previous attempts at reduction had been made and the hernial tumour had been aspirated, but without avail. On the third day of strangulation the pulse was 80, and there was no fever; the scrotum was livid, swollen, and tense, with bullæ under the skin; the penis was œdematous, and the parts had the appearance rather of rupture of the urethra than of strangulated hernia. An incision was made and the sac dissected out. The hernia was found to be a congenital one. A great deal of dark bloody fluid and a long loop of the *small intestine*, which was swollen and black, with a few flakes of lymph thereon, were found in the sac; the peritoneal coat was dull, and an offensive sanguineous fluid drained away. The removal of the dead intestine was decided upon, and division of the stricture was practised. An ulcerated aperture, due to a stricture higher up, was found, but no blood was extravasated into the peritoneal cavity. In the operation a wedge-shaped piece of mesentery was removed, and gave rise to profuse bleeding, which was controlled by the application of a score of fine catgut ligatures. The peritoneum of the mesentery was united by a continuous suture of catgut, first on one side and then on the other.

Then the edges of the gut were turned inwards for a third of an inch, so that peritoneum should come against peritoneum; the mucous coats were united by interrupted sutures, and continuous sutures were used outside these and through the peritoneum only. The method was that of Czerny-Lambert. The inguinal canal was freely divided to allow of the reduction of the intestine. Then the sac was secured by two catgut ligatures and divided between and excised, the lowest part being left to form a tunica vaginalis. The operation lasted altogether two hours, and antiseptics, with drainage-tubes, were used. The collapse passed away in a few hours, and the patient passed flatus ten hours after the operation. The temperature seldom rose one degree above normal, and was for some time after the operation several degrees below normal; a temperature of 100° was the highest reached; the tongue was moist throughout, and the abdomen flat. The portion of the sac left became slightly sloughy, where it formed the tunica vaginalis, but this soon healed. Sponge dressings were used. The man was of placid temper, and showed great fortitude, lying quietly on his back without restlessness for one week. For four days only ice was sucked by the mouth; then some twenty minims of meat-juice were allowed, and the dose of this was increased slowly. Nothing more was given by the mouth until the twelfth day, except a little opium. Absolute rest and warm clothing were insisted upon, and served to prevent waste of tissue. On the twenty-third day the bowels acted after an enema. At the end of six weeks the man was well, and ate plain food. He was in robust health some months later, and seventeen months after the operation he was in a situation in Canada, and there was no reasonable fear of stricture of the intestine supervening. The author then gave an account of statistics, and quoted especially a paper of Mr. Makins, in which 55 cases of gangrenous intestine were tabulated; 45 of these were resected, and gave a mortality of 29 deaths, or about 52 per cent. Death was generally attributed to septic peritonitis. Most of the cases were operated on by German surgeons. A few had been recorded by English and American surgeons. Of 40 cases of resection of the bowel for the relief of artificial anus, there was a mortality of 38 per cent., as against 52 per cent. above mentioned. With regard to the first question, he narrated 6 cases of gangrene which had been under his care, and in which the gangrenous gut was simply laid open, the stricture being left untouched. Of these 3 lived and 3 died; two of the latter were moribund when operated on, and the third died as the result of rupture above the stricture. He thought that there could be no doubt as to the propriety of slitting up the bowel, but it was another question whether the surgeon should interfere with the stricture. Sir Astley Cooper and others advised division of the stricture, but he believed that the best method was to leave the stricture alone. He said the cases did not die from general septic peritonitis, but from absorption of septic material from the peritoneal cavity. He likened the stricture to a rigid ring on the finger, and thought the methods of treatment should be the same in the two cases. As to drawing down a fresh piece of intestine into the abdominal opening, he thought it could be done without dividing the stricture, but would wait for practical experience to say whether the drawing down of fresh intestine was a good mode of procedure. He concluded by asserting his belief that the number of cases in which primary resection of the gangrenous gut could advantageously be performed would be found to be comparatively few.

Mr. FREDERICK TREVES thought that primary resection should be performed in a large series of cases, and he failed to see what great surgical difference there was between excision and incision of the gangrenous gut. There were two methods of dealing with the case after excision had been performed. The surgeon might leave the case till an artificial anus had formed, and then attempt to close the false anus or resect the bowel later on, or he might restore the continuity of the bowel immediately after the excision of the gangrenous portion. The length of time required for the latter operation was a serious element in the case. From a series of experiments on resection of the intestines in dogs, he had come to the conclusion that there was great risk of the parts sloughing if the mesentery were cut so that the main arteries going to the loops of vessels in the mesentery were divided. He preferred Chinese twist to catgut for sutures. In Littré's hernia the stricture ought not to be divided.

Sir WM. MAC CORMAC agreed with Mr. Banks that immediate excision of the gut was not likely to be performed in a large series of cases. He also concurred in the view that the stricture should not be divided.

Mr. MORRANT BAKER also thought that excision and immediate union of cases of gangrenous gut could be but rarely carried out. He narrated a case of acute gangrenous strangulated hernia. He had not yet made up his mind as to the question of division of the stricture, although, following the teaching of his seniors, he had usually carefully divided the stricture. He did not regard with favour the pulling down of fresh bowel.

Mr. JOHN H. MORGAN referred to the difficulty of being sure of removing all the gangrenous gut, for the parts around the actual slough might be in a state of incipient gangrene. He considered that the best practice was the ordinary one of leaving the gangrenous gut *in situ*. An artificial anus could be dealt with later on.

Mr. MAKINS still held to the conclusions at which he had arrived in his paper to which reference had been made. He still thought that a clamp was an advantage in resecting the intestine, which should, however, be a secondary and not the primary operation.

Mr. A. PEARCE GOULD was of opinion that any further drawing down of the intestinal loop would, by increasing the thickness of the stalk of mesentery, lead to a further spread of the gangrene to the fresh bowel drawn down unless the stricture were divided.

Mr. BERNARD PITTS considered that the duration of the strangulation was an important element in deciding on primary or secondary resection; where the strangulation had lasted a long time resection at the time would be most unfavourable.

Mr. WALTER PYE spoke of an increased strain on the mesentery due to a further drawing out of bowel. He referred to a case of gangrenous intestine in which he had established an artificial anus. During exertion the open bowel slipped into the abdomen and caused the death of the patient from peritonitis.

Dr. ORD spoke of the valuable practical discussion which the excellent paper had brought forth.

Mr. M. BANKS, in reply, said that Mr. Treves' recommendation of cutting off the sloughing part, dividing the stricture, and pulling down fresh bowel was practically what Mr. Spence used to advise.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of the above Society was held on Wednesday, April 1st, Dr. J. B. Potter, President, in the chair.

The following specimens were shown:—Dr. Galabin: Fibro-sarcoma of the Chorion; Dr. John Williams: Papilloma of the Peritoneum; Preparations of the Injected Uterus, showing the Circulation; Microscopic sections.

The following papers were read:—

Sequel to a Case of Ovariotomy.—Dr. MURPHY removed a large cystoma of the left ovary from a multipara on January 16th, 1882, and, finding the right ovary enlarged and the seat of cystic disease, he passed a double ligature underneath it, and, having firmly secured the ligatures, punctured the cysts and removed portions of the ovary. The patient made an excellent recovery, menstruated on the third day after the operation, and was regular for nine months, when she became pregnant and gave birth to a healthy male child on June 9th, 1883. The possibilities of a third ovary and the slipping of ligatures were considered and rejected. Attention was directed to the erroneous drawings of the relative positions of tubes and ovaries usually given in the text-books. The author believed that the ovary was usually found superior and posterior to the tube, and hence the tube escaped being ligatured, and the ovary survived (as does the distal portion of the stump) and was able to perform its functions in that diseased and mutilated condition. At the date of the report there is no appearance of a cystoma of the *right* ovary.—Dr. HERMAN said that there were two points of interest in Dr. Murphy's paper. One was the position of the ovary in relation to the Fallopian tube. The arrangement described by Dr. Murphy had been also described by Mr. Doran in his recent book, and Dr. Herman had himself seen this arrangement. The other point was the effect on the blood-supply of the ovary produced by ligature without removal of the ovary. Professor Simpson had done this in a case recorded in vol. ix. of the Edinburgh Obstetrical Transactions, but as this was followed by an attack of peritonitis three months later, it was less instructive than Dr. Murphy's case, which seemed to prove that simple ligature could not be depended on to arrest the function of the ovary.

On the Circulation in the Uterus, with some of its Anatomical and Pathological Bearings, by Dr. John Williams.—The author remarked that although the blood-supply to the uterus is well known, the circulation in the uterus has been less minutely studied, though its importance, both physiologically and pathologically, is great. After briefly sketching the course of the ovarian and uterine arteries as they approach the uterus, the author remarked that all the primary branches enter the uterus on the side; they do not enter deeply into its tissue, but run a somewhat superficial course, being separated from the peritoneum by only a thin layer of muscular fibres. They run in a distinct and even a considerable layer of connective tissue, which is more distinct in the fœtus and infant than in the adult. The muscular stratum between it and the peritoneum is thin, while that between it and the canal forms the greater part of the thickness of the uterine wall. The branches run towards the mucous surface in a perpendicular direction to that surface, anastomosing freely, and ending under the mucous surface in capillary loops, which are often visible even in organs which have not been injected. The veins in the organ are arranged in a similar manner, and convey the blood into the venous plexuses which lie with the arteries in the layer of connective tissue already mentioned, and which communicate freely with the venous trunks outside. The return of blood is said to be effected principally through the ovarian veins; but both these veins can be (as is well known) tied without appearing to materially affect the return of blood from the uterus; indeed, the whole of the pelvic venous system can be injected through any one of its larger trunks. The following conclusions were drawn:—1. The layer of connective tissue in which the arterial circles run, and in which the venous plexus lies, is the submucous tissue of the uterus. 2. The whole thickness of the wall between the layer of connective tissue and the uterine cavity is the mucosa uteri, and the thin layer of tissue shed at the menstrual period and reproduced (the menstrual decidua) is only a very small portion of the uterine mucous membrane. 3. The vascular arrangements are such that the circulation in the uterus can hardly be disturbed by mechanical causes. The entrance and exit take place at numerous points at the sides of the uterus, and in the uterus the direction of the current is transverse to its length and perpendicular to its surfaces; so that a ligature might be placed around the uterus at any point above the vaginal insertion without affecting the circulation above or below. The only ligature which could materially interfere with the flow of blood into or out of the uterus is one surrounding each broad ligament, including their upper borders, together with a portion of the uterus. Conditions like these are found when the uterus forms a hernia in the inguinal canal or in Douglas's pouch in the condition usually, but inadequately, spoken of as retroflexion or retroversion. Both conditions are those of true hernia, and the symptoms are largely due to constriction at the neck of the sac, formed, in posterior hernia, by the sacro-uterine ligaments. In procidentia, again, stretching of the vessels may produce considerable narrowing of their calibre. These two conditions, hernia of the uterus and great procidentia, appear to be the only displacements of the uterus which can give rise to congestion of that organ. The author also described the following experiment to test the influence of flexions in causing congestion. He stitched the fundus of the uterus closely to the cervix, thus securing the acutest flexion possible, and then injected a coloured fluid into one of the veins of the broad ligament; immediately the veins of the other side of the uterus became distended with the injection. On making a section, the whole of the veins in the uterus were found injected. This proves what the arrangement of the vessels has already shown, that the acutest flexion does not interfere with the flow of blood from the uterus. The paper was largely illustrated by diagrams and specimens.—Dr. Graily Hewitt was not surprised at the elaborate arrangements existing in the uterus for providing for free circulation when the organ was flexed. Flexions were doubtless common, and the vascular arrangements were secure against temporary or slight flexions. But in severe or sudden flexions there would be much danger of congestion at the two ends of the uterus. Such congestion occurred in the limbs when bent. His experience was that congestion in cases of flexion was relieved by straightening the uterus, and hence the explanation suggested itself that compression at the central part produced the congestion. He believed incarceration of the fundus by the sacro-uterine ligaments to be extremely rare. Even if it were commoner, it had no bearing on anteflexion, in which there were no ligaments to cause incarceration. Swelling of one lip of the cervix often indicated flexion on the side of the swelling, and argued for the production of congestion by flexion.—Dr. Herman pointed out the great frequency of flexion without any symptoms. That flexion was often combined with congestion depended on the frequency of flexions, and must be the case unless flexions prevented congestion. There were cases of sudden backward displacement with acute symptoms, quickly relieved by replacement, which had no analogy in anteflexion. There were also cases of retroversion without flexion, attended by congestion, and relieved by elevation of the fundus. Such cases were not explained by any theory of flexion, while they were explained by the action of the sacro-uterine ligaments; they were not common, and incarceration in Douglas's pouch was rare, because the ligaments were seldom tense enough and close enough together to be capable of incarcerating the uterus; when they were, they were generally high up and hard to reach.—Dr. Galabin said that the author had proved that the vascular arrangements in the uterus were such as to prevent as much as possible congestion in cases of flexion. He thought the influence of the sacro-uterine ligaments was overrated by Dr. Williams. It was rare to find them constrict the fundus in retroflexion, and rare to find the uterus go up suddenly on reposition, as ought to occur in such cases. There is often evidence of congestion in excessive menstruation in cases of retroflexion, and the symptoms were often relieved by a pessary. In most cases the utero-sacral ligaments had only a minor effect; the stretching and twisting of the broad ligaments, and possibly the flexion itself, ought to be considered. The transverse arrangement of the vessels might be expected to prevent congestion everywhere except opposite the bend. He thought that in the section of the fœtal uterus shown by the author he saw some longitudinal as well as transverse vessels. In procidentia, as the cervix was extruded it became congested, even without any apparent constriction at the vulva. He did not agree with Dr. Herman that the frequent occurrence of anteflexion without congestion proved that flexion could have nothing to do with congestion. Acquired flexion might possibly produce congestion for a time, but the circulation would soon re-establish itself.—Dr. Champneys pointed out that the arrangement of the vessels in the uterus was very similar to that in the intestines, which the uteri of many animals greatly resembled. The intestines were marked by acute flexions every few inches, but no harm to the circulation resulted from them in the case of the intestines, and it was unlikely that the result would be different in the case of the uterus. He thought that congestion was often diagnosed on insufficient grounds, and, indeed, in most cases congestion of the fundus was impossible of verification. Careful examinations made him think that the influence of the sacro-uterine ligaments was rare. In cases of retroflexion with profuse menstruation the influence of descent had to be remembered; it had repeatedly happened to him to lift up the fundus with a pessary, to find the symptoms relieved, and the uterus, high up, indeed, but as much flexed as ever.—Dr. Aust Lawrence (Clifton) said that very few cases of displacement were uncomplicated. He could only remember three such cases of retroflexion of this nature; all these went to prove that the displacement was competent to produce profuse menstruation, and therefore congestion. The first case was that of a single woman aged twenty-two, who was thrown from a cart; the next period was excessive, and he found acute retroflexion and incarceration by the sacro-uterine ligaments. It was replaced, and the bleeding ceased, the next period being normal. The other two cases were similar, with the exception of incarceration.—Dr. Murray agreed with Dr. Williams; although there are cases of congestion with flexion, there are many flexions without congestion. Menorrhagia may occur without flexion. Prolapse of the uterus would tend to produce congestion by impeding the circulation.—Dr. W. Duncan thought that congestion of a retroflexed uterus was not un-commonly due to incarceration by the sacro-uterine ligaments, especially when thickened and shortened by inflammation. Thickening of the posterior cervical lip did not prove an impediment to circulation by flexion, as it was common without any flexion. Many cases of congestion in flexed uteri can be cured without treating the flexion.—Dr. WILLIAMS regretted that there had been no discussion on the doctrine enunciated in the paper that the whole thickness of the uterus within the connective tissue in which the vessels ramify (described above), should be considered to be mucous membrane, this connective tissue being the submucous coat. The muscular layers inside this, therefore, are really the "muscularis mucosæ," into which the uterine glands penetrate. The submucous coat is plainly seen in the fœtus, and also in some conditions in the adult, as the specimens shown illustrate. Dr. Hewitt's illustration from a flexed limb presents no analogy; a flexed finger would have been more apposite, and a finger is often permanently flexed, but no congestion results. Dr. Hewitt believes that congestion will not result from a temporary but from a permanent flexion; Dr. Galabin believes exactly the opposite. Dr. Hewitt's argument from clinical observation requires careful examination of crucial cases, disturbing influences being excluded, such as pregnancy, which is itself capable of producing congestion. Only cases where no pregnancy or disease has ever occurred will serve as arguments. In such cases Dr. Williams had never found congestion follow flexion. Dr. Aust Lawrence's first case confirmed the views stated in the paper; the other cases were not related in sufficient detail to use as arguments. In some cases replacement of the uterus arrests, in others it produces, hæmorrhage; indeed, as Dr. Robert Lee pointed out, a simple vaginal examination in a healthy woman may produce hæmorrhage.

Note on a Case of Absence of the Uterus and Occlusion of the Vagina, by Dr. BOUSQUET (Marseilles).—The patient, aged twenty, had never menstruated, but had suffered from hæmorrhages at the usual periods, sometimes from the rectum, sometimes from the gums, lasting four or five days. When seen, the hæmorrhage had lasted two days; the gums were swollen, painful, and bled on touch. The hymen was very hard; from a small hole in its centre flowed whitish mucus. The hole was enlarged upwards and the finger inserted, but only penetrated two centimetres, where it met a second membrane, tympanitic on percussion. This was incised and the finger penetrated three centimetres further, but no cervix could be felt. Combined examination by vagina and rectum discovered no uterus. The author then cited a very similar case of Dr. John Clarke's in St. George's Hospital, followed by an autopsy in which ecchymoses were found in the skin, pleuræ, and pericardium, together with old endocarditis. The author regarded these cases as proof that the ovarian nisus is sufficient to cause vicarious menstruation when the natural channel is absent.—Dr. JOHN WILLIAMS did not think either of the cases were examples of vicarious menstruation, but of purpura in women without uteri. Histories of periodical bleedings or periodical fits were to be received with much caution. He had watched several such cases in hospital for four or six weeks, and found either no bleeding or fits, or bleeding or fits at irregular intervals.—Dr. ROUTH related a case in which the vagina was too short, and the introduction of the whole hand into the rectum proved the absence of a uterus. This was the only certain way of making the diagnosis. He agreed with Dr. Williams that the case was one of purpura in a malformed woman, rather than one of vicarious menstruation.—Dr. CHAMPNEYS said that women were apt to attribute any unusual hæmorrhages, whether with amenorrhœa or not, to some menstrual influence. It was his habit to make such patients keep a diary of their hæmorrhages and monthly periods. Such an exercise was often sufficient to effect a cure, and in his experience it had invariably sufficed to explode the theory of vicarious menstruation. He agreed with the former speakers as to the nature of this case.—Dr. AMAND ROUTH related the case of three sisters, aged twenty-five, twenty-two, and twenty, who had never menstruated. In the two younger the vagina was only two inches long; in one, recto-abdominal examination proved the absence of uterus and ovaries, in the other the uterus was a nodule the size of a filbert. There was no vicarious menstruation. The breasts and pudenda were childlike. A younger sister, aged seventeen, was quite healthy and menstruated regularly. All the three sisters were very anæmic, and were said to be consumptive.

ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Pathological Section on February 13th, Mr. WHEELER read notes of a case of Gangrene of the Leg and Occlusion of the Popliteal and Tibial Veins in a man aged forty-six, of intemperate habits, who had twisted his leg whilst wrestling. When admitted to hospital the leg was swollen, hot, much discoloured, and with large sanguineous bullæ. He was quite free from pain. The specimen exhibited showed well-formed thrombi occluding the interior and posterior tibial veins, there being the several example of the "obliterating," the "valvular," and the "parietals thrombus; the wall of the vein in the first case being much thinned. Allusion was made to some of the recent theories of coagulation of blood.—The PRESIDENT remarked that the specimens being so dry, it was impossible to tell whether or not there had been any inflammation, but his intemperate habits and the bruise or twist went a long way to explained what occurred.—Dr. M'ARDLE said the twist would have sufficed to tear the inner coat of the vein, which would have led to the formation of a clot sufficient to cause occlusion.

Mr. BROOMFIELD exhibited and explained a specimen of Endocardial Concretion which was taken from an old woman aged seventy-eight. Being a dissecting-room specimen, he had no history of the case. The specimen was of a calcareous character and interesting from its exaggeration, extending round four-fifths of the mitral orifice and running three-quarters of an inch into the ventricular wall. At one point there was complete rigidity. The endothelial lining was perfectly healthy, and the valves were comparatively healthy. It was curious that such a calcareous zone should have formed round the valves without implicating them or causing incompetence. There was no appearance of any other cardiac lesion.

Dr. M. A. BOYD exhibited a Colon removed from a man aged thirty, who died in the Mater Misericordiæ Hospital with all the symptoms of tropical dysentery of a month's duration, having had the usual fetid stools, containing mucus, blood, and shreds of lymph and mucous membrane, with most distressing tenesmus; a dry, brown tongue, dryness of the throat and difficulty of swallowing, vomiting, and hiccough. The temperature throughout, except in the beginning, when the attack came on with shivering and hot skin, was either normal or subnormal. There was tenderness over the liver; no enlargement of spleen and no peritonitis. The descending colon could be felt through the abdominal wall, round, resisting, and tender. The autopsy revealed not ulceration of rectum and colon, but general thickening of the mucous coat of the colon throughout, with exudation upon it of an adventitious lymphy membrane. From the close resemblance of the symptoms to dysentery, many of the so-called cases of dysentery were in reality cases of croupy or diphtheritic disease of the colon.—The PRESIDENT regarded the specimen as a good example of diphtheritic enteritis. There was an absence from it of the fetor which was characteristic of dysentery. Sometimes casts of the entire bowel formed by the membrane were passed.—Dr. LENTAIGNE inquired if there was much superficial tenderness, and if any member of the man's family had similarly suffered.—Dr. HENRY KENNEDY, referring to his extensive opportunities of seeing cases of dysentery in 1847-48, said he had seen the whole bowel from the stomach to the rectum covered with croupy exudations, giving rise to symptoms analogous to those produced by ulceration. A physician to the Queen, who had published an account of a violent epidemic of dysentery in Millbank prison, had recommended mercury as a most effectual remedy.—Dr. BOYD, in reply, said tenderness of the abdomen was absent, except along the descending colon. The family history was good, all the patient's family being healthy.

Dr. LENTAIGNE exhibited an example of Aneurysm at the Base of the Brain, which was taken from a woman who, whilst putting a postage stamp which she had just bought on a letter, fell dead in the shop, as if struck by lightning. Up to the time of her death she had been apparently in perfect health. On post-mortem examination he found a large quantity of blood, effused at the base of the brain, which had come from an aneurysm about the size of a pea, formed in the middle cerebral artery at its junction with the posterior. The artery was split open with a large rent. There was no disease elsewhere, save that the kidneys were small and contracted. Almost all the vessels of the brain were atheromatous, but the aorta was perfectly free from atheroma. A great deal of blood was wedged in below the medulla and spinal cord. The stomach was full of tea and undigested potatoes.—The PRESIDENT observed that the compression of the medulla by the effused blood was no doubt the cause of death

Mr. ABRAHAM read a paper for Dr. NIXON on Pericarditis in a Horse, showing a specimen. The principal features were enormous hypertrophy and an extraordinarily extensive fibrinous exudation covering the whole pericardial surface. The usual weight of the horse's heart was 6 or 7 lb., but this specimen weighed 21 lb. The notes of the case were taken by Mr. J. Kenny, V.S., under whose care the horse had been for pleuro-pneumonia, which had yielded to treatment. A week after the animal was brought back with high pulse and friction-sounds over the heart, subsequently becoming dull. At the post-mortem examination four gallons of yellow fluid were obtained from the pericardium. The hypertrophy of the heart was of long standing, and caused chiefly by the heavy work which the animal had to perform. The pericarditis appeared to be secondary to the pleuro-pneumonia. The immediate cause of death was the enormous pericardial effusion.

After a short discussion the section adjourned.

The opening meeting of the Sub-section of Anatomy and Physiology was held on February 19th, when the President, Dr. D. J. Cunningham, expressed his sense of the honour done him in electing him to the chair for the session; an honour which he prized highly, not only in being considered worthy of succeeding such men as Dr. Macalister and Dr. Purser, but also on account of the great interest which he had all along taken in this department of the Academy.

Mr. BROOMFIELD exhibited his patent Eustachian valve, also a model for showing to a class the changes in the crystalline lens during accommodation.

Dr. BENNETT exhibited a facile method of demonstrating Alternation of the Sectors of the Crystalline Lens of the Eye to a class by injecting ether into the posterior side of the capsule of lens, or between the vitreous humour and retina, a small quantity of mercury which formed a bright reflecting surface, the shape of which depended on the surrounding tissues. The results obtained by the mirror posterior to the vitreous humour appeared to give the best results. He stated that for a successful demonstration an eye not too fresh and a top light are desirable.

Mr. M'ARDLE read a paper on a case of Anomaly of the Arch of the Aorta. The branches derived from the transverse portion from right to left were: right carotid, left carotid, left vertebral, left subclavian, and right subclavian. The only ones having a peculiar course were the right carotid and right subclavian. The former at its origin was somewhat to the left of the trachea. After ascending for half an inch it passed directly to the right, in front of the sixth and seventh rings of the trachea, and then upwards on the right side of that structure. The subclavian came off from the posterior aspect of the arch on a level with the remains of the ductus arteriosus; thence it passed in from off the second and third dorsal vertebræ, and behind the trachea and œsophagus, so that these structures were compressed between it and the foregoing vessel. The only other peculiarity of this trunk was its cone-shaped origin, where it was at least half as large as the aorta. It diminished to the normal size before giving off a single branch.—The PRESIDENT said the case which Mr. M'Ardle had so well described was one of the commoner varieties met with in the dissecting-room of the anomalous arrangement of the aortic branches. It was one of the most interesting of all the anomalies, because at first sight it appeared to be very difficult of explanation. The difficulty, however, at once disappeared on close examination. It had been shown lately that the anomaly was associated with the transference or transposition to the right side of the thoracic duct. This was explained by supposing that the thoracic duct, like the aorta, was laid down in the form of two lateral tubes, which afterwards fuse. It was interesting to notice the relation of the laryngeal nerve, because the fourth arch, counting from above, was obliterated, and therefore it was not recurrent at all, having nothing to hook round. There were about five cases on record of the transference of the thoracic duct to the right side. These were given by Drs. Crookshank, M'Donnell, Brown, and Arthur Thomson of Edinburgh.

Dr. BROOKS gave a description of an Anomalous Coronary Branch arising from the Pulmonary Artery. The case occurred in an old female subject in the dissecting-room of Trinity College, Dublin. The abnormal branch arose from the left anterior sinus of Valsalva of the pulmonary artery; it was rather under an eighth of an inch in diameter, and its branches ramified chiefly on the infundibulum of the right ventricle, a few small ones supplying the coats of the pulmonary artery. Both the normal coronary arteries were present, and were rather large.—Dr. PURSER observed that as there was free anastomosis it must have carried arterial blood, and must have acted as a vein. The blood must have flowed from the point of high to the point of low pressure.—Dr. BROOKS, in reply, said the anastomosis was tolerably defined in one part. He had no doubt some of the arterial blood must have travelled on account of the high pressure. Still the communication did not seem to be sufficiently free for the whole of the blood to go that way.

The PRESIDENT communicated a paper which he received from Professor SHEPHERD, of Gill College, Montreal, on Musculus Sternalis in an Anencephalous Fœtus. In six such specimens Professor Shepherd had found the anomalous muscle, and in five of these he had been able to make out its nervous supply to be the same as that of the pectoral group of muscles.

Dr. BROOKS related a case of the Vena Azygos Major ascending on the Left Side, and discussed the bearing of this Anomaly on the Develepment of the Azygos Bloodvessels. It occurred in a male subject, and appeared to be a transposition from right to left of the normal arrangement. The vein ascended on the left side of the bodies of the dorsal vertebræ, receiving the left intercostal veins, with the exception of the first and second, and also a branch from the right side, which entered it at the level of the eighth dorsal vertebra, and was formed by the confluence of two veins, which lay on the right side of the bodies of the vertebræ; the superior of these two received the sixth, seventh, and eighth intercostal veins; the inferior collected the blood from the ninth, tenth, and eleventh intercostal spaces. The left azygos thus formed attained to the size of an ordinary azygos major; it crossed the junction of the transverse and descending portions of the aortic arch, and opened into the left innominate vein. A small vein opened in the ordinary position of the (right) azygos major; it was formed by the confluence of four intercostal veins, but the trunk lay not in the ordinary position of the azygos major on the bodies of the vertebræ, but on the ribs external to the gangliated cord of the sympathetic. This peculiar position was interpreted as representing a larger portion of the posterior cardinal vein persisting than usual. A remarkable bend in the course of the left azygos, whereby a portion crossed the necks of the tenth and eleventh ribs, was explained in the same way. Reference was made to the symmetrical condition of the venæ azygos in the embryo as affording a ready explanation of the transposition—the right, instead of the left, azygos system having been broken up.—The PRESIDENT remarked that this anomaly was also of interest from a comparative anatomy point of view, because in some of the lower animals it was the normal arrangement for the vena azygos major to pass up the left side, the opposite to that in the human subject. In the sheep this was the case. In marsupials it sometimes chooses the one side and sometimes the other. The Tasmanian wolf was an example of its passing up the right side, as with ourselves.

The PRESIDENT gave a description of an Andaman Skeleton, and compared it with those of other races. He referred to the two elaborate papers which had been communicated by Professor Flower to the Anthropological Institute upon the osteology and affinities of the Andaman islanders, and showed how closely the skeleton in his possession bore out the many remarkable facts described by that author. He especially directed attention to the lower jaw, vertebral column, and the sternum. He compared the lower jaw with that of a European child of five years old, and showed how closely they resembled each other. In both the feebly marked chin, the poor development of the basal or subdental part of the body, the low ascending ramus, and shallow coronoid notch were very manifest. The cervical vertebræ were distinguished by their spinous processes exhibiting very little tendency to bifidity. The bodies of the lumbar vertebræ were not moulded in such a fashion as to give any assistance in the formation of the lumbar curve; in fact, the sum of their anterior measurements was considerably less than the sum of their posterior measurements. The sternum was remarkable for its extreme narrowness, but this is a feature which the author considered might possibly be an individual peculiarity, as he had had no opportunity of examining this bone in other Andaman skeletons, and Professor Flower had not mentioned it in either of his papers. The author concluded by stating that Professor Flower had unquestionably put his finger upon the salient point in connexion with the Andaman skeleton when he called attention to the many infantile characters which it exhibited.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society was held on March 12th.

Leucocythæmia.—Dr. DYSON introduced a patient with Splenic Leukæmia. He was about forty years of age, married, and a blade-forger. He says he was healthy up to his present illness. There was no history of alcoholism, syphilis, or ague. The illness commenced five months ago, with wasting, loss of strength and appetite. There was no pain, and no history of hæmorrhage. He lost 2 st. in weight. Since his admission to the public hospital there has been pyrexia, the temperature ranging from 99° to 102° F., and quick pulse. The abdomen is half filled with the enlarged spleen, which presents the usual characteristics. Bronchitis was present on admission, and there were profound anæmia and œdema of the legs. Systolic hæmic murmurs were heard at the base of the heart, and white corpuscles were greatly in excess in the blood; red, paler, and forming rouleaux imperfectly; also smaller corpuscles, very highly refractive and spheroidal. One observation of the urine gave in twenty-four hours 62 oz. and 446·4 grs. of urea; no albumen or sugar. The treatment pursued had been quinine, iron, and arsenic, internally, and the constant galvanic current externally.

Aortic Stenosis.—Dr. BANHAM introduced a boy aged eleven years, suffering from aortic stenosis. There was some hypertrophy of the left ventricle, and indeed the compensatory changes in the heart were complete, so that no cardiac symptoms were complained of. The chief peculiarity in the case was the exaggerated character of the systolic murmur and thrill, both of which had been noticed by the child's parents. The murmur could be heard not only all over the chest, but throughout the whole length of the spine and over the occipital bones, and also when the ear was withdrawn an inch or two from the front of the chest wall. The thrill, which was excessive over the upper part of the chest and in the large vessels, was recognised the moment the hand was placed on the boy's shoulder. There was no evidence of aortic dilatation, the second sound of the heart was not generally audible.

Epilepsy.—Dr. PORTER read a paper on Epilepsy. After reviewing briefly the theories which had been put forward to explain the phenomena of an epileptic fit, he quoted from notes of twenty cases which had come under his treatment among a total of 841 out-patients at the Sheffield Public Hospital and Dispensary last year. Of these, eleven were males and nine females; in three cases there was a family history of epilepsy, in two of insanity, and in four of other nervous disorders, making a total of nine out of twenty cases in which there might be inferred hereditary tendency to brain affections. The fits occurred for the first time, in a very large proportion of these cases, either between ten and twenty years of age, or after thirty. As the exciting cause, two cases were attributed to head injuries, four to sudden shock or mental troubles, one to onanism; two originated with pregnancy, one at the commencement of menstruation, and one at the menopause. In reference to the connexion between epilepsy and uterine neuroses, Dr. Porter referred to Prof. Charcot's description of so-called hystero-epilepsy, and contended that in those cases at all events in which the hysterical and epileptiform paroxysms occurred together, the epileptic characters were *more* simulated than real; he deprecated the use of the term "epilepsy" in the nomenclature of this class of affection. In six cases out of twenty Dr. Porter met with a distinct aura, and in four more there were distinct premonitory symptoms. In enumerating the drugs he had found most serviceable, he laid special stress on hydrobromic acid in drachm doses; sodium nitrite he considered a very dangerous drug, from what he had seen of it in epilepsy. Dr. Porter considered that the proposal to introduce such an operation as the ligature of the vertebral artery in epilepsy should be received with the greatest caution.

Reviews and Notices of Books.

The Local Government and Public Health Orders relating to Urban and Port Sanitary Authorities, &c. By R. CUNNINGHAM GLEN, Barrister-at-Law. London: Shaw and Sons.—It is well known that the Local Government Board have, in their Poor-law and sanitary capacity, issued a considerable number of orders, circulars, memoranda, and sets of instructions, and that a number of the former have the force of law; some also have been repealed or cancelled; and as regards others, it is not always easy to decide whether they are or are not the ones which remain in force. Under these circumstances, the issue by Mr. R. C. Glen of a volume containing all such valid documents, arranged in proper order and carefully indexed, supplies a real want, and the work cannot fail to be of considerable service. Every subject as to which orders have been issued will be found to be included, and some of the orders, such as those relating to the constitution, &c., of joint hospital boards, cannot, without a great deal of trouble to those seeking them, be found elsewhere than in such a volume. In short, as a work of reference Mr. Glen's book will doubtless find a place in the libraries of many who are engaged in administering sanitary and Poor-law matters in this country.

Eczema and its Management: a Practical Treatise based on the Study of Three Thousand Cases of the Disease. By L. DUNCAN BULKLEY, A.M., M.D., Physician to the New York Skin and Cancer Hospital, &c. Second Edition. New York: G. P. Putnam's Sons. London: J. and A. Churchill.—The perusal of the second edition of Dr. Bulkley's considerable work on Eczema shows that he has spared no pains to make his views quite clear, and the work generally a thoroughly practical one. The previous edition was received with much favour, and in this second issue the author, whilst not altering in any way the principles of theory or practice, has made considerable additions and revisions with excellent judgment. General practitioners, for whom the work is more especially intended, will find in it a clear and trustworthy guide in the treatment of a very common and often embarrassing disorder. We may mention that Dr. Bulkley's views closely correspond with those held by Wilson and Fox in this country.

The Hunterian Oration delivered at the Royal College of Surgeons of England, Feb. 14th, 1885. By JOHN MARSHALL, F.R.C.S., F.R.S., LL.D., Past President of the College. London: Smith, Elder, and Co. 1885.—Our readers are already familiar with Mr. Marshall's excellent Hunterian Oration, for it was published in full in our columns immediately after its delivery; but we are confident that they will welcome this reprint, especially as it is enriched by some useful references and notes. The Hunterian orator has a difficult task, for he addresses a critical audience familiar with the many excellent deliverances of past orators; but Mr. Marshall undoubtedly succeeded in imparting freshness to the theme in his discussion of the connexion between recent advances in surgical and histological knowledge and the views of John Hunter. Often as the Hunterian festival comes round, we feel afresh that the life and labours of this great father of scientific surgery are worthy of far more attention than they have yet received, and we welcome any addition to our knowledge of the man and his work.

The Asclepiad. No. 6, Vol. II.—Readers of the *Asclepiad* are now familiar with the general construction of this periodical, and we believe that not the least welcome feature is the account, always interesting and faithful, of some man of mark. The current number is rich in illustrations, and a portrait is introduced with the object of adorning the biographical notice of the anatomist, Vesalius. In the Opuscula Practica Dr. Richardson brings forward a new remedial agent which he believes will play as useful a part in surgery as the ethylates and colloids have already done. This agent is oxalic ether, which is too heavy to be administered by inhalation, though it may be applied hypodermically. It coagulates the albuminoid structures and produces a "free and dry eschar," without any marked constitutional disturbance. It promises to be of service in the removal of morbid vascular growths. The other contents of this number are—the Hygienic Treatment of Pulmonary Consumption; Measures of Vital Tenacity; the Prescription for Alcohol in Disease, a chapter in which we find ourselves almost in complete accord with Dr. Richardson; Researches on Resuscitation from States of Suspended Life. Altogether the present number is a very good one.

Nature's Hygiene: a Systematic Manual of Natural Hygiene. Containing also an account of the Chemistry and Hygiene of the Eucalyptus and the Pine. By C. T. KINGZETT, F.I.C., F.C.S., late Member of Council, Institute of Chemistry of Great Britain and Ireland, &c. Second Edition. London: Baillière, Tindall, and Cox.—Mr. Kingzett, in his second edition, has revised and enlarged his interesting and useful book. He has now divided it into two parts, of which the first deals with general considerations, such as the chemistry of natural oxidation, theories of disease, water-supply, sewage-disposal, antiseptics, and the like; while the second is devoted to the branch of chemistry which the author has made peculiarly his own—namely, the oxidation of the essential oils, particularly those of the pine and the eucalyptus, and the efficacy of their products of oxidation as antiseptic agents. Naturally a considerable portion of this part of the book is given to the consideration of the "Sanitas" preparations invented, or we might more properly say discovered, by Mr. Kingzett, but the treatment throughout is strictly scientific, and there is no trace of the trade puff. There is, indeed, great scientific importance in the facts which Mr. Kingzett has brought to light in regard to the development of peroxide of hydrogen during the oxidation of essential oils. It explains the hygienic value of pine and eucalyptus forests, and, we may add, of "Sanitas," which now enjoys general favour as a disinfectant, safe, pleasant, and useful, although, perhaps, not very powerful.

Syllabus of Lectures on Physiology delivered at Guy's Hospital. By P. H. PYE-SMITH, B.A., M.D. Pp. 110. London: Churchill. 1885.—This little work contains a large amount of information admirably adapted for the students of Guy's Hospital in attendance on Dr. Pye-Smith's lectures, but of less value to those who are taught elsewhere; nevertheless, there is much that is suggestive not only to students, but to teachers. The text consists of a series of short notes such as a lecturer might bring into the lecture-room with him, or which an intelligent student might jot down, when studying his text-book, for the purpose of refreshing his memory. The notes do not, and are not intended to, give details, but simply supply headings which the student might advantageously think and write out at length. The diagrams, of which there are many, are quite original and well worthy of study.

Zigzag Ramblings. By R. T. MANSON, M.R.C.S.—This little volume consists of a republication of a series of papers contributed to the *Darlington Times*, and they well deserve the wider circulation they are likely to enjoy by being issued in a separate form. The book reminds one of Gilbert White's "Natural History of Selborne," containing as it does descriptive sketches of the physical aspects and features of Darlington and its vicinity, given in an easy and attractive style. To the residents of the locality, especially, the *brochure* cannot but prove an agreeable coompanion during a stroll along the hedgerows and through the lanes and copses of that part of the north of England. Familiar lessons in botany and geology, interspersed with entomological and meteorological facts and references, with the introduction here and there of quaint axioms and moral reflections, make up a very readable little book, which is worthy of a somewhat better dress than that in which it is presented to the public.

SUPPOSED POWER OF ACCOMMODATION IN AN APHAKIC EYE.

To the Editor of THE LANCET.

SIR,—I think that the facts reported in Mr. Bickerton's case, published in your issue of March 21st, can be explained without supposing that the eye possesses any power of accommodation. It is well known that the retinal images need not be formed with absolutely mathematical accuracy in order that vision may reach the standard which is usually accepted as the normal one; it is also an accepted fact that the larger the retinal image, the less do the circles of diffusion interfere with vision. A difficulty in choosing between lenses differing from each other by less than 1 D is, I should say, rather the rule in testing the distant vision of cataract patients after operation. In testing the near vision, also, there is always a range extending on either side of the point for which the glass employed adapts the eye, which extends, I believe, further on the proximal than on the distal side of that point. I have no precise data as to its extent, but am convinced that it usually comprises several inches. In the present instance, the refraction, being 10·5 D + 14 D, would adapt the eye for a point 11·3 in. from the glass; the range, therefore, was slight on the distal side, but reached 4·8 in. on the proximal.

I fail to understand Mr. Bickerton's meaning when he says that "on either side of our strictly mathematical focus for near objects (p.p.) there is a small range of space in which we can see." The *punctum proximum* (p.p.) is the point for which the eye is adapted when using its maximum accommodation; the range, therefore, on the distal side of this extends to the "far point" (p. r.)—i.e., in the normal eye to infinity. The range on the proximal side of p.p. is greater when, as in Mr. Bickerton's case, there is a lens before the eye, because the images are then somewhat larger. As long as the distance of the lens from the eye is insignificant as compared with the distance of the object, as is the case in distant vision, the difference in the size of the retinal images is inappreciable, but when the object is brought within a few inches it becomes considerable. I think that Mr. Bickerton fails to appreciate the fact that the power of reading 1 Jaeger at 9 in. does not indicate a very high degree of visual acuity. The height of the letters being 0·75 mm., they would have to be held at a distance of 16 in. to give the same size to the retinal image that occurs in seeing $\frac{20}{30}$. The really extraordinary point in Mr. Bickerton's case, as reported, is that his patient had a visual acuity which was double the normal standard. I have not referred to this earlier because I suspected the statement that vision was $\frac{20}{10}$ to be a misprint. If Mr. Bickerton really intended to convey this, the case is, as far as I know, unique; and it is to be hoped that he will publish further particulars in reference to it, stating particularly the exact height of the letters used, their exact distance from the eye, the number employed, and the number read correctly.

I am, Sir, yours truly,

W. ADAMS FROST.

Wimpole-street, March 23rd, 1885.

P.S.—Since writing the above I have examined a patient, aged thirteen, on whom I operated, in January for lamellar cataract in one eye. With + 11 D the visual acuity is $\frac{20}{70}$. With + 15 D he reads 1 Jaeger over a range extending from 11·4 in. to 5·75 in. (measuring from the lens). Of course he reads best at the distance for which the glass adapts the eye—viz., 10 in. This, for some unexplained reason, was not the case with Mr. Bickerton's patient. I do not think that this range is in the least usual; were it so, many patients would in some respects be better off before the operation than after the most brilliant result.

THE LANCET.

LONDON: SATURDAY, APRIL 25, 1885.

A VERY important financial experiment is at this moment threatening, the effect of which, if it were successfully carried out, would materially tell upon the profession of medicine. It is said that a Life Assurance Company is about to be formed the leading feature of which is to be that all necessity for a medical examination of the insured shall be dispensed with. The statement of the person about to insure will be put to a severe test. He or she will have to affirm the state of health, at the moment of commencing the contract, on a form so explicit and binding that anyone who intentionally deceives will inevitably have to forfeit all benefit. It is thought, we must assume, that each insurer will himself take care, by a medical examination, that he is certain before he insures; and that in this way the usual fee paid by the companies for a private medical report, as well as the fee paid to the medical officers of companies, will be entirely saved.

There is about this proposed experiment just sufficient plausibility to induce many men to give it a trial. There is no part of human action so truly and so rashly experimental as the financial. Men of business, as they are called—those who pride themselves on being called men of business, and who chide everybody who does not come up to their rigid standard of business ability and punctuality,—are often amongst the first to enter on a speculation which to them seems certain, because, on the surface, it presents no irregularities which they care for. It is well known, too, that on all insurance boards there are directors who are ready to accept every case that comes before them, and who would, on the doctrine of chances, accept every case, barring those which were self-condemned, if their more cautious colleagues did not keep them in check. It is therefore anticipated that a sufficient number of capitalists may be found to embark on the new project, and, "throwing physic to the dogs" in the most open fashion, take the risks of life against money into their own hands.

There is yet another reason for supposing that this scheme may for a time float. It is well known that of late years the existing companies have one and all, *as if by unconscious* unity of action, become more and more particular in their selection of lives. There exists, as a consequence, at the present time an enormous uninsured community, the members of which have tried to insure and have failed to carry out their wishes. These still wish to insure, and a new company starting, as it were for their benefit, would find a constituency ready to its hand. At first, too, the scheme might seem to be financially sound, and for one or two years a fair balance of profits might reward the enterprise.

It is well to take a calm survey of all these matters, and so, from its very inception, look the project fairly in the face. It is well, also, on the principle "forewarned, forearmed," to endeavour to detect what fallacies lie at the root of the new proposal. There are so many fallacies that we have no space in one article of this kind to bring even a moiety of them forward; but one or two should be named at once. It would, then, be a fallacy to assume that the design could be possibly successful with any capital that is at present represented by even the richest of the existing assurance offices. If all the companies were to club together into one great society, we think it doubtful if the plan would or could, in the long run, succeed. The value of medical examinations and of medical services does not rest on rough-and-ready statements as to the general health of would-be insurers, but on those refinements of examination which the people in general do not even think of. On the one hand, there are numbers of nervous people who imagine they are about to die, or, at best, will not live long, though they have little organically wrong with them, but who, if they were left to themselves, would never insure in any company to which they had to make a solemn declaration of health. On the other hand, there are multitudes who are ready at any moment to insure, and, disbelieving all statement as to their danger, would insure at once, if they had the power to do so, with nothing but their own evidence to help them into the insurance. Broadly we might divide all who insure into these two classes, and it is in regard to them both in this broad or general sense that the profession comes in most usefully for the protection of certain of them, and for the protection and advantage of all the companies. The doctor, in fact, as things now are, is the man who insures the mere nervous insurer, while he is the man who does not insure the bad reckless insurer, who at all risks would offer himself if he knew that he must be accepted. This point in favour of the present system carries with it in practice the greatest confidence in those offices which maintain the principle of selection of the fittest most determinately. An office that has the credit, or discredit, of accepting all fish that comes into its net is the office most distrusted. Such an office has been, as a general rule, the office that has most frequently failed; and where it has tried the plan and found it wanting, it has been the one which has had most trouble in disposing of its policies and in freeing itself from its troubles.

We content ourselves at this stage with what we have said above. We have given the profession the earliest intimation of a project which affects its honour, its integrity, and its interests. We have indicated the conditions under which the project may find means to offer itself for trial upon the public, and we have noticed the first grounds on which the project is likely to fail. For whatever else may come of the design we shall watch and wait.

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"WHAT is the meaning of this mysterious dispute between the coroner and the doctors? It has been going on, as occasional indications have shown, for a long time—a sort of smouldering fire, sparks glowing here and there in a heap of wood ashes. Yesterday it broke out in a blaze in the coroner's court, and flamed so fiercely that we almost wonder nobody sent for the fire-engines. What does it all mean? There is something about post-mortem examinations—so much we know; and something about fees; and something, too, about hospital doctors, between whom and the coroner there appears to be a deadly feud of some unexplained character." With these words the *Birmingham*

Daily Post, one of the best conducted and most influential provincial journals, commences one of its leading articles on the 18th inst.

The mere fact that in so populous and important a community as Birmingham the relations of Her Majesty's coroner and the medical profession are, on good authority, said to be in a state of chronic conflict, points to a condition of things deeply affecting the public interest. So grave is the actual and possible issue, that we have instituted careful inquiries on the subject.

The office of coroner in Birmingham has a remarkable history, only one vacancy having occurred in it in something more than half a century. For upwards of forty years Dr. John Birt Davies, then senior physician to the Queen's Hospital, was the Birmingham coroner; leaving a record of enlightened and laborious industry almost unparalleled. He only retired on reaching fourscore years; and his merits were somewhat lightly passed over, in the heat of the discussion which attended the appointment of his successor. The relative claims of medical and legal coroners were not seriously discussed, and the Town Council of Birmingham, with whom the appointment rested, decided to bestow it on a distinguished member of their own body, Mr. Alderman Hawkes, a solicitor in leading practice, who had twenty years previously filled the office of Mayor, and had given abundant proof of intellectual attainment and public spirit. He had not long been in office before he instituted two most important and beneficial reforms—the establishment of public mortuaries, and of a central coroner's court, where inquests have ever since been held, instead of at public-houses, as was previously the practice. Unfortunately, at a very early stage in his new career, matters did not run smoothly between the coroner and some of the members of the medical profession, especially so in the case of juniors on the resident staffs of the local hospitals. The sore has not healed with friction; and the contest of the other day appears to have been a test battle between the coroner and a junior of exceptionally high qualification, so placed as to give him apparently some technical advantage over paid residents, who, one after the other, have had to succumb. Dr. William Arthur Foxwell, the gentleman in question, having held the offices of pathologist and resident physician to the General Hospital, was recently raised by the committee of governors to the position of assistant physician, and is now in practice as a physician in Birmingham. Under these circumstances he seems to have been under the impression that, in appearing before the coroner, he was no longer compelled to give unpaid evidence, as he was, by law, during his residence in the hospital. When called by the coroner to state the cause of death, Dr. Foxwell asked for his fee, whereupon an altercation ensued, which we summarise from *Aris's Birmingham Gazette* of the 18th inst., the report in which is in substantial agreement with those of the other local papers:—

"Dr. Foxwell asked for his fee, and said he was not now on the resident staff.—Mr. Hawkes: Do you decline to give evidence?—Dr. Foxwell: I am not resident in the hospital. —Mr. Hawkes: I ask you again, do you decline to give evidence?—Dr. Foxwell: I am not now resident in the hospital. I have travelled all the way from Alvechurch to give evidence at this inquest, and think my expenses should be paid."

If in expressing this opinion the physician was in error, it was open to the coroner to correct him; and everyone who frequents the superior courts knows with how much kindliness and suavity judges always direct professional juniors, whether in their own or the medical profession. But this seems to have been an occasion for severity and not suavity.

"The coroner then called upon Inspector Willis to prove that he served a summons upon Dr. Foxwell at the General Hospital to give evidence at the inquest.—Mr. Hawkes (handing Inspector Willis a paper): Is that my precept?—Inspector Willis: It is, sir.—Mr. Hawkes: Does it include the name of Arthur Foxwell, assistant-physician at the General Hospital.—Inspector Willis: It does, sir.—Did you serve a summons on the doctor?—I did, sir. On Wednesday afternoon last I received the precept, and I served the summons personally.—What did he say?—He said he was resigning his office the following day, but he would attend."

It was surely rather early to call in the police inspector; but Dr. Foxwell preserved his equanimity, and requested to be allowed to make a remark. So reasonable a request, if met in the same spirit, might have put an end to the difficulty, but the coroner seems to have considered that his court was not the place for explanations.

"Mr. Hawkes: You may make any remark you like before the Queen's Bench.—Dr. Foxwell: The statement is not correct.—Mr. Hawkes then asked Inspector Willis to call upon 'Arthur Foxwell to come forth and save his peril.'—Inspector Willis did so in a loud voice three times.—Dr. Foxwell: The officer did not serve me as stated."

Apart altogether from the merits of the question immediately at issue, it surely was an extraordinary proceeding to meet a physician's request for permission to make a remark by threatening him with the Court of Queen's Bench, and directing a police inspector to call upon him in open court, while he stood there, "to come forth and save his peril." The coroner probably felt that the witness should have stated his objection before he was sworn, and that once he had taken the oath he was bound to answer to the best of his knowledge, protecting himself if he chose by submitting under protest; but the fee question having become the subject of a long altercation, this point was reached.

"Mr. Hawkes: Is your objection to state the cause of death because you have not had a fee for the post-mortem examination?—Witness; I have no authority to do so.—Mr. Hawkes: I must commit you for wilful contempt of the authority of the Queen and this court.—Dr. Foxwell: I am sorry you take things in this way.—Mr. Hawkes (sternly): Officer, take this man in charge.—Dr. Foxwell (wavering): Am I to be detained?—Mr. Hawkes: Certainly. You will be sent to Winson Green [the common gaol].—Dr. Foxwell: Have I no right to speak to anyone outside?—Mr. Hawkes: You can speak to whom you like, so long as you remain in the custody of these officers.—Dr. Foxwell: Can I not obtain legal advice on the matter?—Mr. Hawkes: You can send for a lawyer if you like. I shall be most happy to see him. You must not begin to make extortions in Birmingham merely because you have been practising in London. [To the jury:] If I owed him a guinea he could sue me in the County Court for the money. Did you (the jury) ever see such a miserable exhibition as this on the part of an educated man in a struggle after a guinea. Thank heaven, he is not a Birmingham man."

Dr. Foxwell interposed—"I beg your pardon, sir"; and, after a few more questions and answers, these followed:—

"Mr. Hawkes: Can you tell the jury the probable cause of death?—Dr. Foxwell: Yes; shock. I did not understand what you meant; I could have told you that at any time.—Mr. Hawkes: The cause of death was shock?—Dr. Foxwell: No, sir; I did not say that. The "probable" cause of death was shock.—Mr. Hawkes (sarcastically): After half an hour's trouble we have got this much from the witness—that the probable cause of death was shock.—Dr. Foxwell: That is not——Mr. Hawkes: Pray don't interrupt, sir; don't interrupt me again.—Mr. Hawkes was proceeding in his remarks when Dr. Foxwell again interrupted.—Mr. Hawkes (to Sergeant Gosling): Remove this man from the court.—Dr. Foxwell: That evidence is worth nothing. Shock might be caused by anything.—Mr. Hawkes: Remove him; take him away. We will not be bothered with him any longer. I must resent these insults to the court from members of hospital staffs.—Dr. Foxwell: And I hope that the hospital staffs will resent the insults of the court.—Sergeant Gosling and Police-constable Twigg then escorted Dr. Foxwell to the door."

This is certainly one of the least creditable altercations we ever remember as having occurred in a coroner's court. Conceding that the Birmingham coroner may have been annoyed by the demeanour of the juniors at a particular hospital, it can scarcely be doubted that, on proper representations being made to its managing committee, they would have assisted Her Majesty's officer in the discharge of his highly important duties. But it is not easy to see how such an altercation as that above recorded can conduce to the protection of life or to the dignified administration of justice. An old legal practitioner may naturally have little sympathy with the aspirations and worldly inexperience of a distinguished young scientist, who, even if injudicious (we do not say he was so), yet did not deserve to be treated as a *quasi*-felon. Above all, it behoves legal coroners, if not exceptionally informed on medical matters, to be very careful to obtain accurate medical evidence, and to avoid anything approaching to a conflict with medical witnesses.

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Mr. Mitchell Banks read an important and valuable paper at the Medical Society on Monday last on the Treatment of Gangrenous Gut in the operation for Strangulated Hernia; and it was successful in initiating a good discussion. Many months ago Mr. Banks was called upon to operate for a scrotal hernia which had been subjected to considerable violence by the patient's efforts to reduce it. The coverings were greatly swollen and livid in colour, and on opening the sac there was an escape of clot and bloody fluid, and a coil of gangrenous intestine was exposed. In view of the absence of putrid suppuration in the sac and of the good general condition of the patient, Mr. Banks drew down the intestine until he exposed healthy bowel, and then proceeded to excise several inches of the gangrenous intestine with a wedge-shaped piece of mesentery, and to unite the cut ends of the bowel, which he finally returned within the abdomen. The man made a good recovery, and is now well and able to follow his occupation as a cook. This appears to be the first recorded case in which this operation has been successfully performed, and Mr. Banks is to be warmly congratulated upon the success which rewarded his skill and care. This case formed an excellent text for a consideration of the line of treatment to be carried out in similar cases.

The patients who present themselves with gangrene of the strangulated bowel may be roughly grouped into three classes. There are, first of all, those who are in a moribund condition, dying from exhaustion consequent upon the unrelieved strangulation, the vomiting, &c. In these all the surgeon can do is to afford the relief that is to be obtained by a free incision into the bowel and an evacuation of its contents, with the removal of obstruction. In such cases no further treatment can for a moment be considered. Then there is the small class of cases, of which Mr. Banks's is an instance, in which both the local and the general conditions are favourable, where the coverings of the hernia and the sac are not infiltrated with putrid serum or pus, and where the patient's strength is not exhausted by incessant vomiting. The conditions are favourable for recovery, and where assistants and the necessary appliances are at hand, the operation performed by Mr. Banks is indicated. This procedure requires considerable time, and no little skill and care in the complete arrest of hæmorrhage from the divided vessels in the mesentery and in the bowel, and in the careful adjustment and closure of the bowel. A septic condition of the wound will also with almost absolute certainty be attended with a fatal result. The after-treatment requires to be conducted with the greatest care and judgment. Even under the most favourable circumstances, this operation will always involve considerable risk, and it is only the fact that it affords the quickest means of restoring the patient to the best possible condition that justifies the procedure. Between these extremes of cases are others in which the general condition is such as to admit of recovery if the obstruction be relieved, but in which both it and the local condition are such as not to admit of the resection and union of the bowel and its return within the abdomen. In these cases the practice of surgeons has varied, and it was Mr. Banks's object to elicit opinion in such a manner as to make the practice more uniform. One course open—and it was strongly advocated by Mr. Treves—is to excise the gangrenous bowel, and, gently drawing down the ends of the bowel, to unite them to the skin wound and make an artificial anus. Subsequently, when the conditions are all favourable to the operation, this anus can be excised, the ends of the bowel united, and the parts replaced within the abdomen. The argument in favour of this plan is that it at once removes the sphacelus and securely fixes the bowel to the skin, preventing its slipping back and causing fæcal extravasation. The subsequent resection of the anus is a much less dangerous operation than when performed primarily for the gangrene. On the other hand, it is alleged that when the dead bowel is freely incised the sphacelus very quickly melts down and separates; that the disturbances at the neck of the sac may be the means of allowing septic matter to pass into the peritoneal cavity; and, further, that the cutting off of the intestine, if done beyond the sphacelus, must be attended with hæmorrhage; while yet another objection to this plan arises in those cases where the extent of the gangrene is doubtful at the time of the operation.

The alternative plan is to make a free incision into the gangrenous bowel, to evacuate its contents and the fluids infiltrated in its walls, and to make a free passage for the contents of the bowel above, and, having done this, to leave the parts to nature. The slough is very quickly thrown off and a fæcal fistula remains. This may close spontaneously, or may be made to close by such a device as has been described and successfully practised by Mr. BANKS or by some similar means. Or the surgeon may subsequently resect this portion of bowel and restore the continuity of the bowel within the abdomen. The simplicity and success of this procedure will no doubt commend it to the majority of surgeons, and make it the usual course to be adopted in these cases. But in connexion with it the questions arise—whether the stricture should be divided, and whether it is well to draw down obviously healthy intestine into the neck of the sac. Each of these queries should, it would seem, be answered in the negative. The parts about the neck of the sac should be left as undisturbed as possible, for not only may the bowel be greatly thinned and weakened just where it has been nipped by the stricturing band, but the adhesions formed on its inner surface which shut out the peritoneal cavity from the wound may be broken through, and a path opened for the passage of septic matter into that serous sac. As Mr. BANKS rightly stated, septic poisoning, and not peritonitis, is *the* cause of death after operations for strangulated hernia; and in cases where the contents of the sac are septic, as they usually are in gangrene of the gut, no pains should be spared to preserve the adhesions which may have formed about the hernial ring. The surgeon will also, of course, take all the steps that seem to him advisable to cleanse the external wound, and to render the escape of the intestinal contents and effused fluids absolutely unimpeded. If the discussion of this subject result in rendering more certain and clear the lines of practice in this serious condition, which may arise suddenly in the practice of any surgeon, it will have been abundantly justified, and such we believe will be the case.

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IT is, we think, imperatively necessary that attention should be at once directed to one most urgent matter in connexion with the public provision for the care and cure—or cure and care, as it ought to be—of the insane. The need of small hospitals for the prompt and active treatment of mental disease is very plain and very pressing. In 1877 the following plan was suggested:—To provide in every district a hospital, properly so called, thoroughly furnished with all necessary appliances for the physical and moral treatment of insanity. Attached to this hospital, so far as the conduct of its general arrangements is concerned, to construct an institution—or if necessary more than one—to which patients not either requiring or likely to be benefited by active personal treatment, but still needing medical care, may be removed when in the course of each individual case it becomes apparent that this transfer will not prejudice the final chances of recovery. In connexion with the workhouse, or in some appropriate institution—for example, a "workhouse asylum"—to provide suitable wards for the senile and infirm, whose recovery is impossible, and who tarry only for death. It was contended that this threefold system being efficiently organised, the necessary circulation of cases might be readily maintained without either indefinitely multiplying costly buildings, or allowing the curative establishment to become blocked against recent and curable cases by the stagnation of chronic cases. There would, moreover be this great advantage in the plan suggested—the capacity of the hospitals required in any district could be determined, not on a vague conjecture as to the probable rate of increase in the total number of pauper lunatics, but upon the more definite, and though neglected not impracticable, basis of the number of persons *becoming insane.* This general scheme was then worked out in detail from the statistics available as follows:—In Middlesex the admissions to the asylums at Hanwell and Colney Hatch during the year 1875 amounted to 1054. The discharges and deaths in the same year were 1044. It was estimated that about 30 per cent. of these case-endings, as they may be called, either by removal or death, occurred *within six months of their admission.* This is a most important consideration. The average number resident in the Middlesex county asylums for the period was 3906, and it was calculated that the actual accommodation required for *new*—that is, recent—cases would not exceed 1000 beds for the whole county. The rest of the accommodation provided was, in fact, devoted to the *care* of the insane, as distinguished from their *cure.* In Surrey, the total admissions in 1875 at Wandsworth and Brookwood numbered 834. The discharges by death or recovery were 568, of which some 30 per cent. took place within six months. The average number resident in the two public asylums of Surrey at that time was 1699. A hospital with 600 beds would therefore, it was urged, suffice for the cure of insanity in that county. Some addition to these computations was made for the new cases sent direct to licensed houses, and then the general inference was drawn thus: One curative establishment—or, better still, two—in Middlesex and one in Surrey, not exceeding the manageable proportion of 600 beds, with an ample medical staff and a sufficiently large number of attendants, would do more to keep down insanity *by curing the highest proportion of curable cases* than the most energetic and skilful use of the machinery at present employed could accomplish. In these small curative establishments it would be possible to make the treatment of each patient an object of special care. The progress of the malady might be watched, the exhibition of appropriate remedies at specific periods would be possible, and *the same clinical observation and research might be brought to bear on the work of cure which are now practicable only in hospitals.*

We reproduce this proposal as meeting the full requirements of the case, and affording an opportunity for the solution of the great difficulty of the moment with regard to the temporary custody of those who are alleged to be insane, but whose actual condition is doubtful. At each of the hospitals provided there would be receiving wards, and to these magistrates might remand cases for observation Attached to such hospitals, also, there would be wards for sleeping purposes only, allowing patients who were sufficiently recovered to "work for their living" to remain under supervision for awhile, going to their homes by day and returning at night, until they were quite fit to be discharged. "Out-patient" departments also would be practicable. In short, there would be the nucleus of a complete development of the hospital system with facilities for the clinical pursuit of mental disease by students of medicine; the net results being to place disease of the mind, so-called, on a footing of equality with disease of the body. This would at once bring the light of day to bear strongly on the subject of insanity and on the care of the insane. We again commend the consideration of this scheme in its entirety to the attention of the Legislature and the profession.

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At a recent meeting of the Obstetrical Society of London Dr. John Williams related his researches on the circulation in the uterus. Briefly told, the arrangement of the vessels is the following: The ovarian and uterine arteries run along the sides of the uterus and give off numerous branches, which proceed horizontally inwards and form circles round the organ; from these vessels run towards the uterine cavity in a direction perpendicular to the surface. It results from this that each portion of the uterus has its blood supply secured to it at its own level, and is not dependent upon any segment above or below it. The paper was illustrated by numerous specimens of injected uteri, both fœtal and adult. The arrangement of the veins is similar, and secures a free return of blood; the venous anastomoses of the veins outside the uterus are numerous and free, and it is an almost everyday observation that the ovarian vessels may be tied without embarrassing the return of blood from the uterus in any serious or permanent manner. The paper enunciated new views as to the real nature of various layers in the uterus. According to Dr. Williams, the primary branches of the vessels run in a layer of connective tissue near the peritoneal surface, which is more plainly seen in the fœtus than in the adult, and is really the submucous layer, usually said to be absent. The muscular layer outside this, which is very thin, is the true muscular wall of the uterus, while the whole thickness within the submucous coat is the mucous coat, and the muscular layers in it, forming the chief thickness of the entire wall, constitute the "muscularis mucosæ," into which the glands dip. The "mucous membrane" affected by the menstrual cycle is the "decidua," and is only a very small portion of the mucous coat. These observations derive additional force from a study of the uteri of many of the lower animals, which are thin. The chief practical importance of the paper, however, lies in the assertion of the author that a ligature may be tied completely *round* the uterus at any point above the vaginal injection without affecting the supply of blood either above or below, and that therefore flexions of the uterus can have no effect upon the blood supply, in the way of causing congestion. The mechanical theory of uterine pathology has been subjected to a series of searching scrutinies of late. The researches of *Vedeler and Herman*, already quoted in these columns, have shown that displacements are extremely common, and that their effect on the production of dysmenorrhœa and allied disorders can no longer be maintained. They are now subjected to another ordeal; it is here contended that flexion pure and simple cannot conceivably produce congestion. In the discussion which followed the paper, Dr. Graily Hewitt, the champion of the mechanical system, acknowledged that the vascular arrangements were probably competent to secure an equable supply and return of blood in temporary and slight cases, while in severe and sudden cases congestion was very likely to ensue. Dr. Galabin subsequently took the exactly contrary view that although there might be some obstruction to the circulation at first, collateral circulation would probably soon equalise matters. Dr. Hewitt fell back on his personal experience of cases of anteflexion as well as retroflexion complicated by congestion. Associations of this sort require to be subjected to the most severe and sceptical criticism by the observers who make use of them as arguments. The sense of the meeting appeared to coincide with that of the writer of the paper, and to agree with him that it is still to be explained how a flexion of the uterus pure and simple can conceivably be a cause of congestion. Displacements appear to be getting at a discount. Judging from the results of debates on the subject, our rising teachers neither teach them nor believe in them. When the "spur at the angle of flexion" cannot be produced in the flesh when repeatedly asked for (though figured freely in text-books); when the idea of flexion has been divorced from that of dysmenorrhœa; when the circulation in the uterus is demonstrated, and a theory of the possibility of congestion being produced by flexion is not forthcoming in the face of actual specimens—what remains? We may at least hope that the rising generation will henceforth be fed with facts and allowed to judge for themselves.

Annotations.

"Ne quid nimis."

THE COUNCIL AND THE FELLOWS AND MEMBERS OF THE ROYAL COLLEGE OF SURGEONS.

We understand that a meeting of the Committee of the Association of Fellows was held on Wednesday last, to consider the latest decision of the Council respecting the alterations proposed to be made in the College Charters. Great disappointment—to euphemise—is felt at the continued rejection of several of the fundamental recommendations of the Association, and at the resolution of the Council not to submit the draft of the new Charter to a general meeting of the Fellows and Members. Indeed a rumour is current that the Committee of the Association regard this decision as directly contrary to a general understanding with the deputation of the Association that such a meeting would be held. Steps are, we believe, about to be taken to arrange a programme and a plan of action which will enlist the sympathy and receive the joint support of the two Associations of Fellows and Members. There should be little difficulty in discovering a *modus vivendi* for the two Associations. If this can be accomplished, the speedy defeat and overthrow of the anti-reform league in the Council is certain. It is important that a combined course of action should, if possible, be agreed upon without delay. The annual election is rapidly approaching, and the Fellows will have an opportunity of giving practical effect to their convictions by refusing to re-elect those who are known to have resisted every movement for the reform of the Council, and only by attacking the strongest cases will the Fellows be able to break through the compact body of obstructives.

TESTIMONIAL TO MR. SHIRLEY MURPHY.

It is with great pleasure we find that it has been decided to raise a testimonial to Mr. Shirley F. Murphy, late medical officer of health of St. Pancras. This gentleman has been compelled, out of self-respect and in the interest of the public, and particularly that portion of it most dependent on the conscientious and judicious discharge of duty by the sanitary authorities, to resign his office. Mr. Murphy has, during a period of nearly seven years, displayed a self-sacrificing devotion in prosecuting with unusual zeal very difficult problems of sanitary reform, and always with unvaried success. His investigations into the epidemic of typhoid fever in St. Pancras were carried out with rare acumen and scientific precision; and it is not too much to say that probably some, at least, of those members of the vestry who have earned an unenviable notoriety for obstructing his researches owe their continued existence to his disinterested services. There can be no doubt that the widespread feeling of sympathy for Mr. Murphy that has burst forth in so many quarters will do much to prevent a recurrence of what may justly be termed a grave social evil, and will serve to accentuate the wisdom of the saying, "out of evil good shall come." It is not enough, however, to affirm a principle in order to secure its adoption and practice; and for this reason we heartily join in the hope that the intended testimonial may meet with ready and substantial support from the public and the medical profession. The object is a worthy one, and deserving of recognition and support. Mr. Murphy's resignation represents a cause that should not be allowed to fail at the instigation and action of those who prefer personal advancement to the national weal. Subscriptions may be sent to the treasurer; the secretaries, Mr. J. W. Gandar, 157, Camden-road, and Mr. J. A. Heaton, 8, St. Bartholomew's-road, N.; or any member of the executive committee, which is at present constituted as follows:—His Honor Judge Chalmers, Hon. Sec., London Fever Hospital; the Hon. Lady Henry Somerset, 16, Albert Mansions, S.W.; Dr. J. G. Glover, 33, Compton-terrace, Highbury, N.; Rev. Mark Wilks, 12, St. Bartholomew's-road, N.; J. H. Badcock, Esq., M.R.C.S., 126, Gower-street, W.C.; John Hamer, Esq., Hon. Sec., Mansion House Council on Dwellings of the Poor.

PARASITES OF THE DOG.

As the seasons come round various ideas as well as things crop up, and of late we have had a plentiful supply of parasitic scares. Last year we had the entozoa of the mackerel wherewith to frighten poor and uninstructed people. Not long before that we were warned of the danger of eating pike and other fish, it having been alleged that trichinæ were found in a jack caught in the harbour at Ostend. This year the scare concerns the dog; and since a F.R.S. lends his name to the movement, let us see what he states. As an anatomist dealing with the vertebrata Mr. Mivart's reputation stands high, but we are not aware that he has made a single experiment or contributed a solitary new fact in relation to the parasites of the dog. He tells us that the "eggs" of the Tænia cœnurus "pass into the sheep's blood." That is ridiculous. The eggs do not pass; but their contents, in the form of six-hooked embryos, having been liberated in the true or fourth stomach, bore their way into the organs of circulation, and are at length carried to the brain. This was experimentally proved by Küchenmeister. Mr. Mivart next tells us that the hydatid, or "bladder-worm stage of existence" of the Tænia echinococcus "is passed, *not in the body of any domestic animal*, but in that of man himself." The italics are ours. This is too bad. One would think Mr. Mivart had never dissected a pig, a sheep, or an ox, in which animals these hydatids are remarkably prevalent, much more so certainly than they are in man. There is not a veterinary surgeon of experience living who has not encountered them. No doubt in Iceland, Australia, and India they are more abundant than in this country. At the Health Exhibition last year Dr. Cobbold showed drawings illustrating the pathological changes produced in the lungs and liver of English sheep and swine, and perhaps *it may interest* Mr. Mivart's friends to know that one liver of a pig there drawn displayed several hundred of the bladder-worms which, he says, do "not live in the body of any domestic animal." They will also be further interested to learn that "six pigs of the same litter, four months old, were similarly affected, all of them having been sent to market and sold as food." In the shilling pamphlet on the Parasites of Meats, "issued by authority," and published by Messrs. Clowes and Sons, the whole subject in relation to infection is fully explained. Another kind of evidence will perhaps better show the misleading nature of Mr. Mivart's dictum. We allude to the evidence to be derived from statistics. By a report received from the executive commissariat officer at Mooltan, it appears that so far back as 1868, during a period of fifteen months, commencing in October, 2109 animals were slaughtered in the district for the purpose of supplying rations to our troops. Of these cattle no less than 899 were affected with hydatids—that is to say, with those bladder-worms which Mr. Mivart has the temerity to inform the public do not pass this stage of their existence in the body of any domestic animal! Sanitarians are greatly indebted to Dr. Cleghorn for publishing these statistics; and, now that we are on the subject, it may be added that the majority of the animals were affected in both liver and lungs. The cysts occupied the liver in 829 instances, and the lungs in 726 instances. The kidneys and spleen were infested in a few cases. In regard to the questionable practice of fondling pet dogs and allowing them to lick the hands and face, we are inclined to agree generally with Mr. Mivart. The act of licking, however, would not be likely to communicate tapeworm, as the readers of the letter in question might be led to suppose, but such action would in certain cases readily convey the germs or eggs of a totally distinct kind of entozoon, which the late Professor Frerichs showed to be very common in the human liver in Germany. *We allude to the Pentastoma tænioides*, better known in its larval stage as P. denticulatum. It is a comparatively harmless entozoon, but, as Dr. Landor has shown (*Berliner Klin. Wochenschrift*, 1878), it may prove *fatal to man in the adult condition*. It has also been known to prove destructive to the dog itself.

INDUSTRIAL INSURANCE.

The abuse of what is known as industrial insurance, especially of infantile insurance, is effectively dealt with in a supplement to a Lecture on Life Assurance recently issued by Mr. Arthur J. Cook. The subject is one the importance of which can scarcely be insisted upon too often or too strongly, in order to secure the further legislative action which the recent notorious cases at Liverpool show to be imperatively necessary. The reckless competition among agents of rival companies and the manner of their remuneration have led to gambling in life policies, which obviously affords inducement and facility for the crimes brought home to the women Flannigan and Higgins. Mr. Cook, from knowledge personally acquired in many parts of the country, is assured "that tens of thousands of husbands have been insured by their wives for sums up to the limit for which a medical examination is not required." The proposal forms for membership of Industrial Companies and Burial Clubs contain certain questions which ought to be answered, and signed by the person whose life is to be insured. There is every reason to believe, however, that in a large proportion of cases the supposed signatures or marks of the husbands upon the proposal forms are those of the wives, when they have not been written by the agents themselves. However this may be, there is no disputing the fact that insuring lives without the knowledge of the insured is one cause of the recent great extension of industrial insurance business.

The system of industrial insurance, and the way it is worked by competing and often unscrupulous agents, calls for a Government inquiry, with a view to further legislation for the protection of the public. Although insurances made by persons having no interest in the life insured are null and void, it is evident that this enactment should be supplemented, as Mr. Cook suggests, by making the effecting of an insurance by an uninterested person a legal offence. The present competitive traffic in small policies constitutes a grave social danger, profitable as it unfortunately is to industrial companies and agents.

THE DIRECTOR OF PUBLIC PROSECUTIONS.

A DRAFT report has just been issued of *regulations under* the Prosecution of Offences Acts, 1879 and 1884. This is to be submitted to the Lord Chancellor and the Secretary of State for the Home Department for their approval. The codification of the regulations drawn up for the guidance of the Public Prosecutor will do much to remove the uncertainty that has hitherto prevailed with regard to that official's duties. We have several times had to call attention to the unsatisfactory way in which criminal investigations have been instituted and conducted, notably in the case of Messrs. Bower and Keates. It is to be hoped that the reforms now under consideration will entirely remove the opprobrium that has undeniably been thrown upon a very important judicial institution. The first clause of the draft regulations defines the cases in which it shall be the duty of the Director of Public Prosecutions to "institute, undertake, or carry on a criminal proceeding in respect of an offence. These are: (1) where the offence is punishable with death; (2) where the offence is of a class the prosecution of which has been undertaken by the Solicitor of the Treasury; (3) where an order is given to the Director by the Secretary of State or the Attorney-General; and (4) where it appears to the Director that the offence, or the circumstances of its commission, is or are of such a character that a prosecution in respect thereof is required in the public interest, and that owing to the importance or difficulty of the case, or to other circumstances, the action of the Director of Public Prosecutions is necessary to secure the due prosecution of the offender." It will be seen that, whilst the conditions under which the Public Prosecutor is to act are more or less closely defined, a very wide discretionary power will still be vested in him. The tenth and last clause, though a short one, will be received by the public and the profession with unqualified approval, seeing that it contains a guarantee against frivolous and vexatious actions, and neglect or misconstruction on the part of the Public Prosecutor. It runs as follows: "The action of the Director of Public Prosecutions shall in all matters, including the selection and instruction of counsel, be subject to the directions of the Attorney-General." So that in cases of difficulty or doubt the opinion and advice of the latter official can be sought, and he it is who will be to a great extent responsible for the proper carrying out of the regulations. Even where the interference of the Attorney-General is not required, the knowledge of the fact that the Public Prosecutor is subject to his directions and answerable to him for any action he may have taken on his own authority will serve as a wholesome check against irregular procedure. The second clause gives to the Public Prosecutor the power of directing investigations which in his opinion are necessary to secure the due prosecution of the offender. The third clause enables the Public Prosecutor, either on application or on his own initiative, to give such advice and assistance as he may deem requisite to clerks of justices of the peace, and to chief officers of police, &c. The fourth clause enacts that where a case has been reserved for the opinion of the High Court of Justice, and counsel has not been instructed for the prosecution, the Public Prosecutor *shall, at his discretion, or on the fiat* of the Attorney-General, issue such instruction. Clause 5 refers to the powers of the Public Prosecutor, as to authorising "the preparation of scientific evidence, the remuneration of scientific witnesses, the payment of extra fees to counsel, the preparation of plans and models, &c.," on the sanction of the Attorney-General. Clause 6 confers upon the Public Prosecutor the power to cause the chief officers of every police district to furnish him with such information as is required by the Prosecution of Offences Act, 1870 and 1884. Clause 7 relates to the production of documents and other things. Clause 8 provides the Public Prosecutor with the power of obtaining documents, &c., from clerks of justices of the peace, whenever he finds that actions or prosecutions which should have proceeded have been allowed to drop. Clause 9 bears on the employment and payment of solicitors engaged by the Director of Public Prosecutions. From a perusal of these proposed regulations, it will be found that an earnest endeavour has been made to put the appointment of Public Prosecutor on a creditable and well-defined basis, and to furnish the country with a judicial department worthy the name. It remains to be seen how far these principles will be exemplified in practice.

MULTIPLE XANTHOMA.

WE have been favoured by Dr. Hardaway with a reprint from the *St. Louis Courier of Medicine* of an account of an interesting case, in a man aged forty-four years, of multiple xanthoma, exhibiting the plane, tubercular, and tuberose varieties of the eruption. The lesions were perfectly symmetrical, except for a remarkable corymbose band on the right side of the trunk in the trajectory of some cutaneous nerves. Such an occurrence has been, hitherto, unrecorded, and was, possibly, determined by a zona. The eyelids, upper lip, chin, elbows, wrists, hands, nates, thighs, legs, feet, genitals, mouth, soft palate, and trachea were involved. The patient had an enlarged liver, and had been treated for chronic hepatitis. Jaundice of twelve years' standing had rendered the skin almost black, and the surface was much scratched and scarred from the intense pruritus ever present. The xanthoma had gradually evolved in the course of four years, and seems to have commenced in the gluteal region. There was a trace of sugar, but no albumen, in the urine. Dr. Hardaway suggests that xanthoma is a diathetic affection, and that jaundice, when it occurs, is secondary to an early xanthomatous implication of the liver.

SHORTCOMINGS OF THE FACTORIES ACT.

WHILE it is not to be expected that the business of factories and workshops will go on without a measure of danger from accident and illness, the last return presented to the Home Office on this subject shows that the minimum of avoidable mishap is still far from being attained. A large percentage of reported cases of accident are evidently due to carelessness on the part of employers and employed. Among these are such as arise from insufficient fencing of machinery, from hurry in piece-work, and from the regrettable practice of entrusting the cleaning of machinery to young boys or girls. A part of the report of special interest to the sanitarian is that which deals with the atmosphere of work-rooms. Interesting facts are communicated with respect to overcrowding, and the varieties of trade phthisis which are apt to follow the inhalation of many kinds of dust-laden air. Of equal or even greater public importance are the statements contained in this return with reference to the condition of the class known as "sweaters," who supply the market, particularly in the clothing trade, with work done in their own homes. Accounts of the destitution prevailing in this class have found their way into the press in many recent publications respecting the state of the London poor. A house-to-house visitation by the Factory Act inspectors during 1884 has further proved the powerlessness of that Act either in controlling working customs or in improving unhealthy domestic surroundings. The Act, indeed, was not meant to extend to the above-named body of operatives. We find, accordingly, that of 1478 such workrooms visited by the inspectors, 734 were exempt from their jurisdiction in all respects, while 367 were equally free from their sanitary control, though subject to that of the local authorities. Those who have visited among the poor, professionally or otherwise, can best appreciate the meaning of these assertions, which not only signify that much unjust overwork continues to press where it can least be borne, but also indicate a serious public danger, for the clothes which are stitched in slums where infectious disease is rife are found a day or two later exposed as the ready-made goods of some fashionable tailor; and the same is true in principle of other kinds of merchandise. There are many who wish to see the Factory Act so amended and extended as to cover the needs of shop *employés*. The returns before us show that the real limit of the influence of that measure is coextensive with paid labour in almost every kind and degree of trade and manufacture, and such an extended application need not, we think, imply a too particular official interference.

COLOUR-BLINDNESS.

AN interesting and important report upon the tests for colour-blindness used in examining candidates for masters' and mates' certificates of competency in the British mercantile marine has just been presented to both Houses of Parliament. It has been drawn up by Mr. Thomas Gray, of the marine department of the Board of Trade, and deserves careful consideration. The colour test in examinations for masters' and mates' competency in the British mercantile marine was established by the Board of Trade in May, 1877; and since then all candidates for these posts have been compelled to pass a test examination as to their ability to distinguish black, white, red, green, yellow, and blue, which are the chief colours that enter into the combination of signals by day or night used at sea. It is singular, however, considering the magnitude of the interests involved, the immense value of the property in jeopardy, to say nothing of the numerous lives that are yearly lost by collisions and by shipwrecks which might well be avoided, supposing them to be, as they unquestionably are, due in many instances to colour-blindness, that these tests have not been generally insisted on, not only for officers, but for men who are on the look-out; yet Mr. Gray states that he has never yet heard that a shipowner, or even a master of a ship, applies the colour test to men employed as A.B.'s. It may reasonably be asked to what end are the mates and captains of merchant ships tested for colour-blindness, when many others to whom the steering and course of the ship is constantly entrusted are never examined at all. In the locomotive service on land, whilst it is absolutely necessary that the engine-driver should have correct appreciation of colours, the signalman might be subject to defect of this sense without harm to the public, since his movements are guided by printed directions in respect of which there can be no mistake, and the coloured glass he turns on to the driver is turned away from himself; but in the case of a ship the movements of each of the steerers are guided by the same sense, and disastrous accidents are sure to happen if either steerer fails to accurately distinguish colour. It would hardly be credited that up to the present time pilots are not compelled to give evidence of their full possession of the colour sense. Mr. Gray points out that for the small sum of one shilling all sailors have an *opportunity of being* examined, and expresses his regret that the Board of Trade has not been supported by the shipowners. That numbers of officers who obtained certificates before the colour test was prescribed are still afloat and in charge of vessels there can be no doubt. These should all be subjected to examination without delay. To the report is attached a page with three cards coloured respectively red, light-green, and black, which are used by the examiners. To this test we should be inclined to take exception, and would suggest the substitution of a pink for the vermilion. It is not uncommon in cases of partial colour-blindness for a patient to indicate saturated colours correctly, whilst he is totally unable to distinguish pink from a light shade of green. It is precisely such colours which are the most important in practice. When the lights are bright and clear red and green, the loom of the vessel can almost always be seen, and no collision can occur but through intense stupidity; but when there is a light haze, a red light becomes pink and indistinct, and the partially colour-blind is then at the greatest disadvantage; the lights may be seen but the vessel is invisible, and the result of confusion of colour may be anticipated. An officer who not long ago was compelled to leave the service on account of colour-blindness had actually brought home several of Her Majesty's vessels as flag lieutenant from the Mediterranean; and in this instance, whilst saturated colours were easily recognised, pale greens and pinks were constantly confused. His defect was easily ascertained by placing coloured lamps at a distance of several hundred yards. Mr. Gray mentions, without recommending, Dr. Thompson's skeins, which are certainly very serviceable. One point in the report strikes us as remarkable. It is stated that in regulations still in force a candidate who fails to pass the colour test may be re-examined after the lapse of three months from the date of his failure; if he fails a second time, he is allowed a third trial at the expiration of three months from the date of his second failure. Does the Board of Trade think colour-blindness a defect that can be got over by study, and that by applying his mind a man can overcome the difficulty as he would the use of the sextant? Surely a competent ophthalmologist should revise the regulations.

AN APOLOGY FOR LONDON SMOKE.

THE debate at the Society of Arts on Wednesday week on the sewage question and on the removal of refuse other than sewage called forth two papers, one by Dr. Thomas Hawksley, the other by Dr. B. W. Richardson. Dr. Hawksley repeated the arguments he has so long and so skilfully used in favour of the earth-closet system, and the total abolition of water carriage of sewage matter. Dr. Richardson dealt almost entirely with the work of the dustman, an official whom all Londoners look upon with almost as much awe as they do on a Prime Minister, and who, indeed, is to many a household even a more important officer, taking him all the year round. There were a number of weighty matters of a practical kind in both essays, but the point which seemed to elicit the most attention, and which met with considerable approbation at the moment when it was announced, was Dr. Richardson's statement that London smoke, bad as it may be and is, is not an unqualified evil in the present state of the sanitation of the metropolis. The argument was that so long as householders are obliged to ventilate their house-drains by means of long tubes extending to or above the roofs of their houses, and so long as they pollute the air in those upper regions, so long also does the fine carbon of the smoke from the chimneys, poured out almost at the same level, exert a salutary influence over the drain emanations. In other words, if London air were entirely free of carbon and were systematically charged from houses with sewer gas, the clear air would become a noxious air, and it is better, therefore, to let the clarification of the heaven above be suspended until the purification of the earth beneath can at the same time be secured. This is, without doubt, a view of the subject in hand that deserves to be considered. That cases of disease have been engendered by the emanations from ventilators into bedrooms seems beyond question, and that carbon in a state of fine subdivision is a destroyer of organic poisons from decomposing materials is not less certain. We ought, therefore, to keep in view in all future sanitation the necessity for cleanliness from the drain of the dwelling as well as from the chimney-pot; sanitation, like all else, having its basis in mother earth.

UNIVERSITY COLLEGE HOSPITAL.

HIS Royal Highness the Prince of Wales has consented to preside at a festival dinner on behalf of the funds of this hospital, to take place on Wednesday, May 13th, at the Langham Hotel. The committee are naturally anxious that the efforts made by the friends and patrons of the hospital and medical school shall prove as successful as the occasion is auspicious. It will doubtless interest the past students at the College and Hospital to know that last year an "Old Students' Jubilee Fund" was initiated by the medical and surgical staff with a view to obtaining means for the ultimate rebuilding of the hospital. The Dean of the Medical Faculty will, no doubt, be happy to receive, in the shape of substantial contributions, appropriate assurances from former students that they are not unmindful of their indebtedness to their *alma mater*.

LORD BRAMWELL ON DRINK.

THERE is nothing so much spoken against nowadays as "drink," and nothing, consequently, in more need of apologists. Some very good judges, indeed, think, from the very severity of the vituperation, that it must be overdone. That vein of charity in the human mind which sees a soul of good in things evil has asserted itself, and both in the medical and legal professions great champions are on the ground to see that justice is done. It is well that it should be so. Lord Bramwell, as the able spokesman of the League for Defending Liberty and Property, has written a smart little defence of "drink." He admits the harm it does: "Disease is brought on, health is ruined, insanity and death are caused, by excessive drink. There is no doubt also that crime is caused by drink." He admits all the harm done, but claims that the good done is more. We must make clear what are Lord Bramwell's views of the good done by "drink." First, "it gives a vast deal of pleasure and enjoyment to those who take it with moderation." But his second, and perhaps chief, argument is that it is useful. With much skill he throws on other shoulders and on another profession the responsibility of stating this part of the case. He falls back on Sir James Paget's well-known argument that the best and the largest quantity of brain-work is being done by the nations in which the use of alcoholic drinks is and has been habitual; and further, that as regards the brain-work of different persons, "they have done the best and most who have habitually and temperately taken alcoholic drinks." It is exceedingly difficult to make comparisons of this kind of much value, as the nations and persons so compared differ in so many other respects besides the mere difference of alcohol-taking. It must be admitted that teetotalism has still its feats to achieve in war, in genius, in statesmanship; and with practical men such rough judgments as that of Sir James Paget will have much weight. But Sir James himself would be ready to admit that even some of those who have done the best brain-work took too much alcohol, and that the world might have got much more good work out of them had they taken less. With one of Lord Bramwell's positions we are not quite satisfied. Society's right to interfere with individual liberty being limited to securing person and property from external and internal attacks, he thinks the prohibition of "drink" not within the right of society. But if its prohibition be not within the right of society, certainly the prohibition of drunkenness is well within its right. Drunkenness is altogether an offence to society, and an injury as well. There is nothing more clear than that drunkenness tends to poverty, and that the family of the drunkard is apt to become a burden on the ratepayers. They have a perfect right to prevent the sale of that amount of drink which involves them in heavy taxation and their fellow-citizens in misery and disease.

EPIDEMIC OF MEASLES AT BUENOS AYRES.

LAST summer Buenos Ayres experienced an epidemic of measles, an account of which is published in the *Revista Argentina* by Dr. Penna. At the beginning of the year there had been a number of cases of very mild enteric fever; these were followed by a considerable increase in fatal puerperal affections, and in June the number of small-pox cases usually existing increased markedly. The first cases of measles which then appeared occurred in lodging-houses, families were then attacked in their residences, and finally the soldiers and gensdarmes of the garrison. The drainage of the city was at the time in an unsatisfactory state. Dr. Penna saw sixty-two cases, varying from two to forty years of age. The incubation period varied from eight to nine days. The symptoms of invasion were, as usual, chills, headache, prostration, languor, anorexia, insomnia, and elevation of temperature, followed by the characteristic oculo-nasal catarrh, photophobia, lacrymation, coryza, sneezing, &c., and afterwards by tracheo-bronchial symptoms, with sometimes violent cough simulating that of croup. Moist and dry râles were heard frequently in the chest, sometimes arousing suspicions of phthisis. Several cases of epistaxis occurred; none of them were severe. In two children considerable subconjunctival hæmorrhage took place, encircling the cornea with a sanguineous ring. There were no cases of convulsions, but delirium was frequent where the temperature was very high. The course of the fever in no instance gave cause for alarm, except where complications existed. The remission on the third day, as described by Jaccoud, and which Kaposi states appears on the second or third, and which by its constancy serves to distinguish the catarrhal inflammation preceding the eruption, was only observed in adults, who could state exactly when the symptoms commenced, and in some doubtful cases which came under observation from the beginning. The temperature remained high for two or three days, sometimes for four, six, or eight days, until the eruption appeared. These latter cases cannot unfortunately be well explained, and sometimes lead to a doubtful diagnosis. Generally the eruption appeared from the fourth to the sixth day, preceded in some cases by a marked rash on the soft palate and pharynx. It invariably commenced on the nose, chin, forehead, and cheeks, never on the trunk or limbs. The eruption consisted of irregular spots, not always of uniform redness, sometimes slightly raised, and occasionally with papules on the edges. The duration of the eruption varied from one and a half to three days. In one child it lasted six days, the colour being very deep. In a girl of three years the eruption appeared and faded at short intervals several times till the third day, from which time it ran its ordinary course. This child had just recovered from a severe attack of broncho-pneumonia. The fever accompanying the eruption frequently rose to 40° or 41° C., especially in children, and the pulse rose and fell with the fever. The complications were capillary bronchitis, which carried off two children, two cases of croup, and two deaths from lobar pneumonia in Indians. In four cases the disease assumed a typhoid character, in two there was tuberculosis, and in some others suspicions of that affection. No active medication was employed, excepting in cases where complications existed.

MR. COMBER ON THE CONGO.

WE have taken frequent occasion to note the good done in the world by medical missionaries. It is very pleasant to see in other and authoritative quarters a similar recognition. At the Geographical Society last week a very just tribute was paid by Sir Henry Rawlinson to the scientific value of the work of Mr. Comber, who is connected with the Baptist Missionary Society, and in that capacity has explored the Congo to a higher point than any previous traveller except Mr. Stanley. He succeeded in getting up 400 miles beyond Stanley Pool, and by his observations giving scientific clearness and definition to the geography of the river and some of its chief affluents. Speaking of the healthiness of the river, he said that on the coast and the delta of the river Europeans seemed to have good health; also on the Upper Congo between Stanley Port and Stanley Falls they did well. Only one had died. But in the Cataract Region of the Congo, between Vivi and Stanley Pool, about 200 Europeans had been located for the last six years, and about 25 per cent. of these had died. Mr. Comber attributed this high mortality to the fatigue and exposure undergone in building, travelling, &c., and anticipates much less sickness when locomotion is facilitated by the railway, and life by the introduction of skilled labour. It is very gratifying to see our missionaries adding to their beneficent work that of observations of the highest scientific and human interest. Much gratitude was expressed by Mr. Comber and others to Mr. Stanley and to the King of the Belgians.

PREVENTION OF THE SPREAD OF SCARLET FEVER.

THE *Medical Record* of New York, March 14th, contains the report of a discussion, in the Practitioners' Society of New York, on the subject of Practical Considerations on the Propagation of Acute Infectious Fevers, especially Scarlet Fever. The first question raised was the contagiousness of scarlet fever during the stage of incubation. Some speakers believed in the possibility of this, but the chief evidence went to show that the disease was very feebly infective at this stage, if so at all. As to measures deemed necessary during the sickness of the patient to prevent the spread of the disease, nothing very new was suggested, and the chief reliance was on isolation and plenty of air, the disinfection of clothes, and the hanging of a sheet wetted with a disinfectant solution before the door. One gentleman thought the room, and not the child, was the chief source of danger. Some speakers were disposed to think that the whole of the desquamative period was not infectious—only the earlier weeks; but Dr. Kinnicall very properly demurred to this, and said that careful thermometric observations showed that a slight elevation of temperature persisted in the third and fourth weeks in a large number of uncomplicated cases. He pointed out, too, that cases had occurred in which desquamation had lasted until the seventy-seventh day. The fourth question discussed was whether physicians should attend both scarlet fever cases and obstetric cases at the same time. Several speakers thought it undesirable. The President thought the risk much exaggerated. We think so oo, if such precautions as those taken with visitors at the London Fever Hospital and by most careful practitioners are duly observed. The chief of these are, after doffing the outer clothing, to put on a surplice over the remaining dress of the physician in going into the patient's room; to wash the hands and, if possible, the mouth carefully on leaving the patient's room, of course prescribing and enforcing all due precautions for limiting the diffusion of the scales from the skin and securing their being burnt. With such precautions as these there will be little risk of the spread of infection by means of the medical attendant.

"AN OFFICIAL FIB."

A MADRID medical journal just to hand thus expresses its views on the subject of the epidemic in the province of Jativa, which was announced in certain newspapers as cholera:—

"What is taking place in Jativa? A malady prevails which has in an unlooked for manner become epidemic, whose symptoms make us suspicious of Asiatic cholera, a disease which has had several victims, which is communicated from one to another, and about the diagnosis of which there is disagreement amongst skilled observers; a disease, too, which has produced much alarm amongst the inhabitants, and has required preventive measures, sanitation, and a hospital service, and, indeed, all the measures which are adopted in dealing with true cholera. In official circles it is called gastro enteritis—an official fib,—which will become incorporated in statistics, reflecting but little credit on the exactitude of science or on the truthfulness of those who write such fraudulent reports. What purpose can be served by this bold attempt to hoodwink public opinion, giving rise to the most dangerous uncertainties, and the result of which it is impossible to foresee? What teaching can efface the occurrences last year in Toledo, Tarragona, Alicante, Novelda, and other places where politicians gave vent to their complaints? The Cortes have now been open three months, and no one has thought it necessary to demand from the Government a satisfactory answer to a question as to their behaviour in this matter, thus leaving the country in a sad state of uncertainty as to the course to be pursued. We shall not be surprised if, as the recent statements from Jativa and another town in Valencia makes us fear will be the case, similar untruths are promulgated on any repetition of these occurrences that may take place this year."

This would seem to be an excellent opportunity for Dr. Ferrán to demonstrate conclusively the practical value of his researches on "cholera vaccinia." His colleague, Dr. Pauli, stated at a banquet, lately given in honour of Ferrán, that he (Pauli) had just come from Jativa. We shall look with interest for an account of what results he has to report.

IMPRISONING AN UNDOUBTED LUNATIC.

NEXT to solemnly hanging a maniac who in his morbid frenzy has slain a fellow-creature, there is no more grotesquely absurd and humiliating proceeding than that of imprisoning a lunatic who declaims somewhat inconveniently in public. We confess our inability to understand how any magistrate with two ideas and time to think can have come to the conclusion that it was consistent with the dignity of a justice of the peace to commit an undoubted victim of insane delusions as is Herbert Freund—sometime an inmate of the City of London Asylum at Stone—for two months imprisonment. The procedure was not fair to Freund, and may be perilous to the community. We have no right, and it is not prudent, to irritate madmen. When this poor man comes out of prison to continue his labours as a prophet acting under "inspiration," he may conceive it to be his duty to do more dangerous work than simply disturbing a crowd or a congregation. Surely this is a matter in which the Secretary of State may be fairly asked to interfere. Freund should either be certified and sent to an asylum or allowed to go at large, and the police should be instructed to move him on gently, though effectually—not to treat him as a man responsible for his actions, which he unquestionably is not.

THE EXPLOSION AT THE ADMIRALTY.

ANOTHER explosion, this time at the Admiralty Offices, Whitehall, took place at about eleven o'clock on the morning of the 23rd. By it the assistant secretary, Mr. Swainson, was injured. The explosive compound, probably dynamite, and about two pounds in quantity, was placed in a cupboard above, somewhat behind and to the left of the secretary, who sustained serious injuries. When found he had evidently been blown from his chair, and was lying against the wall, huddled up, covered with dust, and quite insensible. The unconsciousness lasted for about two hours, and was followed by vomiting. Slight irregularity of the pupils was observed. There were several scalp wounds, one being about three inches in length; all were contused, and there was much dirt in them. The bone was not injured. There was also a contused wound of the left conjunctiva near the inner canthus. There was no deafness. The eyelashes, eyebrows, and hair had been burnt by the explosion.

SIR WILLIAM JENNER.

WE regret to say that Sir William Jenner is at the present time confined to his room by indisposition. About nine years ago Sir William had a short attack of plastic bronchitis, from which, however, he recovered completely. On Tuesday last, after seeing his patients, in the evening there was a recurrence of this affection, attended by slight hæmorrhage. There has been no febrile disturbance, and the malady is gradually, but certainly and steadily, disappearing. Dr. Russell Reynolds has been in constant attendance upon him, and has been in daily consultation with Sir William Gull.

SEPTICÆMIA.

Is septicæmia the result of the action of ptomaines or microbes? This is the question which M. Jeannel and of M. Laulanié have attempted to answer in a brief paper communicated to the French Congress of Surgery (*L'Union Médicale*, April 16th). Ptomaines, being in a state of solution, are able to penetrate the layer of granulations lining a wound. Microbes cannot enter the circulation unless a solution of continuity exists in the layer of granulations. As septicæmia is only observed when a break in the continuity of the living membrane of a wound exists, the authors conclude that the ptomaines play a subsidiary *rôle*, whilst the principal part in the pathogeny of septicæmia is left to the microbes. The arguments used are, in our opinion, not absolutely conclusive.

THE RABBETH MEMORIAL FUND.

THE subscriptions to this fund, which is now closed amounting to between £800 and £900, will be devoted to the maintenance of two cots, one at King's College Hospital, and the other at the Royal Free Hospital. The Senate of the University of London had £100 from the fund placed at its disposal for the founding of a Memorial Medal, but this has been declined with thanks, lest it should be considered a precedent for the authorities of the University. Mr. J. E. Rabbeth (Dr. Rabbeth's father) has offered a sum of money to the Council of King's College to found a Scholarship in memory of his son, who was educated first in the School and then in the medical department of the College. The offer has been gratefully accepted, and, at Mr. Rabbeth's desire, the money will be devoted to a special exhibition for boys passing from the school into the medical department. A final committee meeting will be held at King's College about the middle of May, probably on the 18th.

THE PUBLIC HEALTH (MEMBERS AND OFFICERS) BILL.

A MEDICAL officer of health, in adverting to our recent annotation on the "Public Health (Members and Officers) Bill," considers it very unfair that officers should not be allowed to have shares, or be interested in, waterworks or gasworks. In so far as the prohibition holds good, we are of opinion that it is very undesirable for medical officers of health to be pecuniarily interested in concerns the prospects of which it becomes their duty to promote for the purposes of health. It is only recently that a medical officer of health found himself seriously hampered in his endeavour, during an epidemic of enteric fever, to secure the closure of polluted wells, and the substitution of a water from the public mains, and this because the inhabitants had been given to understand that he was interested as a shareholder in the water company; and it was only as the result of a public announcement that this belief was incorrect that the needed action could be taken. There may be individual cases of hardship, but the principle involved in the prohibition referred to is sound.

THE ARMY MEDICAL STAFF: THE REVISED SCHEDULE.

THE revised schedule of qualifications of candidates desirous of obtaining commissions on the Army Medical Staff, with the conditions of service, has just been issued. The only change which has been made in it since it was withdrawn last month is that the position of the officers on the list will be determined "by the combined results of the competition and qualifying examinations," instead of the competitive examination only. We consider this change to be satisfactory, as holding out an inducement to, and reward for, good work done in the school at Netley.

UNHEALTHY HOUSES.

THE decision arrived at in the case of "Chichester *v.* Lance," which was tried last week before Mr. Justice Wills and a special jury, is another step in favour of tenants who seek to make their landlords responsible for the sanitary state of the houses which have been let to them. In this special case the defendant had effected some so-called improvements, but the work was so carried out as to be ineffectual; and typhoid fever having occurred in the house, the plaintiff has secured judgment and damages to the extent of £40. Landlords will have to understand that when they let premises as dwellings, it must be regarded as an essential part of the transaction that the premises are adapted to healthy occupation.

GUY'S HOSPITAL.

THE governors of Guy's Hospital have, we understand, made a new departure in the mode of election of assistant physicians. Hitherto the vacant posts have been closed to all but Guy's men. There is now a vacancy for an assistant physician at Guy's Hospital, and it is the expressed desire of the governors that applications should be sent in from any gentlemen who may choose to become candidates. This step cannot fail to be regarded with approval by the profession.

At a meeting of delegates from the metropolitan vestries and district boards of works on the 16th inst., resolutions were passed expressing the opinion that it is desirable in the interest of the inhabitants of the metropolis, and as a general principle, that all telephone and telegraph wires within the metropolitan area should be placed underground; that the control of the construction and maintenance of all such wires should vest in and be under the direction of the vestry or district board of the parish or district; and that a letter be sent asking, on behalf of the conference, that the Committee of the House of Commons should hear one witness from each vestry and district board of the metropolis.

From the report made by Messrs. Crookes, Odling, and Tidy, on the composition and quality of daily samples of the water supplied to London for the month ending March 31st, it appears that of the 188 samples examined the whole were found to be perfectly clear, bright, and well-filtered. The mean amount of organic carbon in the Thames-derived waters for March was practically identical with that for February—viz., 0.18 in 100,000 parts of the water. Considering the condition of the river during the month, and the additional care needful to effect good filtration, it is noteworthy that not one of the 188 samples contained so much as a trace of suspended matter.

At a meeting of the Vaccination Officers' Association, held at the Charing-cross Hospital Medical School on Saturday, April 18th, the members considered the best means of securing the vaccination of children born in public institutions, and it was resolved—"That the attention of the Local Government Board be called to the large number of children who are permitted to leave public and parochial institutions unvaccinated, and respectfully suggest that, if a special fee were paid to all medical officers of public and parochial institutions for successful cases of primary vaccition, the returns of vaccination would to a great extent be improved."

Consequent upon the cholera scare in Spain, the Local Boards of Health in many of the Spanish Mediterranean ports and in the Balearic Isles have, it appears, without even receiving orders from Madrid, established quarantine regulations for vessels from the province of Valencia, whilst several towns refuse to receive goods or passengers from the infected districts, which are nearly free from the epidemic. France, Portugal, Turkey, and Holland have already established a quarantine on arrivals from Spain.

The late Dr. Wells' funeral took place at Reading on Saturday, the 18th inst. Some ten thousand persons of all classes of society assembled in the streets and at the cemetery to pay respect to his memory, and a string of carriages more than a mile in length followed his remains. All the medical men in the neighbourhood attended, as well as large numbers of the clergy, the governors of the hospital, and nurses.

A motion by the Croydon Rural Sanitary Authority that the operation of the injunction granted by Mr. Justice Denman on Jan. 12th of the present year, restraining the authority from polluting a piece of water near Garratt, called the Western Pool, by illegally discharging sewage thereinto, might be suspended, was last week dismissed by Mr. Justice Chitty with costs.

Mr. E. Hurry Fenwick, F.R.C.S. Eng., has been appointed Examiner in Elementary Physiology at the Royal College of Surgeons.

On the 4th inst. the death occurred of Dr. James Lawrence Little of New York. He was Professor of Clinical and Operative Surgery in the New York Post-Graduate Medical School and Hospital, Professor of the Principles and Practice of Surgery in the medical department of the University of Vermont, and consulting surgeon to the Mary Fletcher Hospital at Burlington, Vt.

A Bill is before the Legislature of Ontario, and bids fair to become law, which provides that the bodies of persons found dead, also of those who die in public institutions (lunatic asylums excepted), and are not claimed by friends who are willing to pay the funeral expenses, shall be handed over to the medical schools for anatomical purposes.

A Civil List pension of £100 per annum has been awarded to Edward Scott Docker, Deputy Inspector-General of Hospitals, in recognition of his discovery of the uses of ipecacuanha in the treatment of dysentery, and of his services towards Her Majesty's forces.

A deputation of the Parliamentary Committee of the Medico-Psychological Association waited on the chief secretary of the Lord Chancellor, at the House of Lords, on Monday, the 21st, to express their views on the proposed Lunacy Law Amendment Bill.

The Senate of the University of Glasgow, at their meeting on Thursday, the 16th inst., resolved to confer the degree of LL.D. on Professor Struthers of Aberdeen.

We regret to record the death, on the 18th inst., from enteric fever, of Surgeon Paul Bennett Conolly, who was attached to the right camp, Dongola, as surgeon of the Light Division, Camel Corps. He was in his thirty-first year.

The Bill to amend the Medical Act, 1858, has been just issued.

INDIAN HEALTH STATISTICS.

No. II.

The gaol population in 1883 shows, like the army, a marked improvement in health. The average number of prisoners was 88,174, among whom the admissions into hospital were 996, the deaths 31·37 per 1000, and the daily sick 36·5 per 1000. Intermittent fever was the most prevalent disease, and was the cause of more than one-third of the admissions; abscess and ulcer were next in frequency; dysentery and diarrhœa gave rise to the greatest number of deaths, amounting indeed to one-third of the whole; respiratory diseases were the cause of upwards of one-sixth; fevers and cholera rank next; the deaths from dysentery and diarrhœa were 10·64, from respiratory diseases 5·30, from fevers 2·52, and from cholera 2·28 per 1000. The prisoners, like the native troops, show very little susceptibility to enteric fever, only 15 cases with 8 deaths having been reported. The admissions ranged widely in the different gaols. In Bengal they averaged 949 per 1000; in Bombay, 734; in Madras, 861; in British Burmah, 1159; and in the Andamans and Nicobars, 1454. In Bengal some of the gaols yielded a very high death-rate: at Jalpaiguri, of 117 prisoners 35 died, being in the ratio of 299 per 1000; 19 of the deaths were from cholera, and 10 from dysentery and diarrhœa. Gorakhpur, with 607 prisoners, had a death-rate of 146 per 1000, chiefly from the same diseases; Ranchee, with 160, lost 187 per 1000; Dinágepore, with 184, lost 183 per 1000; and Raipur, with 788, lost 143 per 1000. In no less than ten gaols in this Presidency, including those just mentioned, *the mortality was above 10 per cent.* In Bombay, the only large gaol in which so high a rate occurred was at Shikárpur, where of 656 prisoners 66 died. In Madras the highest rate was 86 per 1000 among 93 prisoners in the Tanjore gaol. At Akyab and Kyaukpyu, in Burmah, the mortality in the gaols was as high as 133 and 169 per 1000; at the former from cholera and dysentery, and at the latter from cholera. In the convict establishment at the Andamans, although the admissions and mean sick were much above the average of the gaols in India, the death-rate was comparatively low, amounting to only 19·63 per 1,000; the sickness and mortality and mean sick were all very much lower than in any year on record.

The sanitary sheets received from the gaols, while recording a considerable amount of improvement, show clearly that there is still much to be done in preventing overcrowding, increasing the means of ventilation, improving drainage, water-supply, food and clothing. We trust that the steady work which has been going on of late years in the removal of insanitary conditions may be continued, as the result cannot fail to be well marked in a progressive diminution of the sickness and mortality among the prisoners.

The registration of births and deaths in the civil population of India is still so imperfect that we fear no reliance can be placed on the results. The returns, however, of the mortality by certain diseases, as cholera and small-pox, afford some interesting information when compared with the results for previous years. Cholera prevailed with great severity in the province of Berar, 27,897 deaths having been recorded in a population of a little over two millions and a half; the death-rate by it amounted to 10·61 per 1000. The disease began in April, but it was not till July that it assumed the proportions of a great epidemic; in July and August 25,198 deaths were recorded. In Assam it caused a mortality of 3·29 per 1000, the most fatal months being January and April to July inclusive. In the Bombay Presidency the death-rate from cholera was 2·31 per 1000, being considerably above the average, but its great prevalence and mortality took place in the Northern Deccan Division, 30,298 deaths having been recorded in it out of a total of 37,954 throughout the Presidency. There is a curious fact mentioned in connexion with the question of fairs as one of the supposed causes of the spread of cholera. In the Sholapur district, where it was prevalent, a fair was held in July, and "the disease appeared among the people with great severity"; while in the Kaira district, where it also prevailed, although to a less extent, the usual fair was held in September, and there the disease did not break out.

In the Report a number of examples are given in which the beneficial influence of removal from the place where the disease broke out was very marked. Among the European troops at Allahabad, the native troops at Kamptee, and the prisoners at Jalpaiguri, the disease seemed to be at once arrested by the movement into camp, and in only one instance—that of the prisoners in Gorakhpur gaol—did it continue to prevail after the change of locality. There is one statement in the report in connexion with the spread of cholera which appears to us to be at variance with the facts as shown by the returns. "No case is adduced which favours the idea that the disease was spread by contagion. The positive information regarding the experience of those who came in contact with the sick is, as usual, altogether opposed to this idea. The results are shown in the following statement, which has been so frequently made in previous reports, that attendance on cholera cases involves no danger greater than that to which all persons residing within a cholera-affected locality, and exposed to the causes which induce cholera, are subject." The table shows the proportion of attendants on cholera patients attacked by the disease to have been: among the European troops 1·57, native troops 2·22, and in the gaols 2·51 per cent. But if the statistics be taken of those stations and gaols only at which cases occurred during the year, the ratio among the troops and prisoners will be found to have been: for European troops 0·50, native troops 0·68, and prisoners 1·70 per cent.; so that the proportion attacked of the attendants was considerably above the average of the others. This does not necessarily prove the disease to be contagious, but it shows at least that the attendants are exposed to conditions which render them more liable to an attack. Small-pox prevailed to a great extent among the civil population in 1883, the recorded deaths having amounted to 22,223, or nearly three times as many as in the preceding year. Its greatest mortality occurred in the North-West Provinces and Oudh, where the death-rate was 3·14 per 1000. In Assam and Berar and in the Madras Presidency it was considerably above the average of past years. Vaccination continues to receive much attention in India, but is still very far from being general.

A brief summary is given at the end of the Report of the investigations made at Calcutta by the German Commission, consisting of Drs. Koch, Gaffky, and Fischer, and by the British Commissioners, Drs. Klein and Heneage Gibbes; but it is unnecessary to notice this, as the information contained in it is rendered of comparatively little value by the more extended reports which have since been published by the Commissioners themselves. In the appendix is a detailed medical history by Surgeon-Major Johnson of the Aka Expeditionary Field Force; and also a medical report of the Indian Division, Egypt Expeditionary Force, 1882, by Deputy Surgeon-General Colvin Smith, who accompanied it as Principal Medical Officer. The latter shows the force sent from India to Egypt to have consisted of 199 officers, 1713 European and 3961 native soldiers, and 6478 followers. The period from the date of arrival of each corps till it was struck off the force varied from thirty-four to sixty-three days. The admissions into hospital from the European troops amounted to 361 and the deaths to 9, and from the native troops to 485 and 6. These numbers, calculated on the strength in the usual manner, show the *annual* ratio of admissions to have been: of the Europeans 1597 and of the natives 919 per 1000, and the deaths to have been 39·82 and 11·36 in each class respectively. Of the 9 deaths among the European troops 3 were from gunshot wounds, 2 by drowning, 3 by sunstroke, and 1 by diarrhœa; of the 6 among the natives, 4 were by gunshot wounds, 1 by dysentery, and 1 by gangrene of foot following an accident on shipboard. The 3 deaths by sunstroke occurred in the Seaforth Highlanders, and were, we regret to say, a result of drinking at Suez and subsequent exposure to the sun; 10 cases occurred in the short march of three miles from Suez to the Victoria Hospital. There were 14 cases in the force during its service in Egypt, and all of them in this regiment. The most prevalent diseases among the Europeans were conjunctivitis and ague, and among the native troops dysentery, conjunctivitis, and ague; dysentery was the cause of one-fourth of the admissions among the latter. Considering the short period during which the Indian contingent was in Egypt and the arrangements which had been made for its reception, it must be obvious that no fair comparison could be instituted between the sickness and mortality in it and the rest of the force in Egypt. But the circumstances under which the Eastern Soudan expedition was undertaken so much more nearly resembled those under which the Indian force served as to permit of such a comparison. That campaign lasted fifty-one days, and was undertaken after due arrangements had been made.[1] The admissions into hospital were in the *annual* ratio of 912, and the deaths of 224·4 per 1000, all of them in action. The sickness, therefore, was almost identical with that of the Native Indian Contingent in Egypt; no deaths were caused by disease in the one force and only two in the other, and of the latter one was consequent upon an accident.

The history of the Aka Expedition by Surgeon-Major Johnson is very interesting. It consisted of 30 officers, 1028 men, and 1993 followers, and lasted two months. None of the officers died; four of the men were killed, and one died of pneumonia, and there were sixteen deaths of followers—ten from pneumonia and bronchitis, four from fever, and two from diarrhœa. Three of the deaths in action were caused by poisoned arrows, and an interesting account of the symptoms is given in the report: The poison is believed to be prepared from the root of the *aconitum ferox*. Great difficulty was experienced in some places in effecting the carriage of the sick in dandies, and some *thappas* were constructed, which are stated to be admirably adapted for the purpose over difficult ground. They are made of canes and split bamboos, and are carried on the back and shoulders of a coolie, and supported by a flat band of woven cane or bamboo, one end supporting the *thappa* below the seat and the other passing round the head and across the forehead of the carrier. "A strong coolie will in this way carry a man of ordinary weight up or down the steepest pathway, as both his hands and arms are free to assist him in difficult places." This appears closely to resemble the modification of the Tyrolean kraxe proposed by Staff-Surgeon Michaelis of the Austrian Army for the carriage of sick and wounded in mountainous districts, to which we called attention in THE LANCET of January 3rd last. We again recommend these proposed means of transport to the consideration of the military medical authorities.

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[1] THE LANCET, Sept. 6th, 1884.

BRITISH DENTAL ASSOCIATION: MIDLAND BRANCH.

THE annual meeting of the Midland Branch of the British Dental Association was held on Friday the 17th inst., at the University College, Nottingham. Mr. H. Blandy presided. A number of specimens, appliances, &c., were shown, and several demonstrations given. The principal of these were—an operation performed illustrating Herbet's method of gold filling; a new method of vulcanite plates in steatite by the dry system, was shown by Mr. Brunton of Leeds; and demonstrations of taking models in plaster by Mr. W. Bowman Macleod.

A Council meeting was subsequently held, the retiring President (Mr. J. Harrison, Sheffield) in the chair. The report stated that in December last the Central Branch was inaugurated in Birmingham, and the Council rejoiced in this multiplication of centres, from which the influence of the British Dental Association must radiate. The membership of the Association was eighty-eight, which was far below what they desired to see. The Council nominated Mr. H. Blandy, of Nottingham, as President, and Mr. A. M. Mathews, of Bradford, President-elect; it is also recommended the holding of the next annual meeting at Bradford. The report was adopted.

In his address, the PRESIDENT (Mr. H. Blandy), after briefly sketching the history of the British Dental Association, alluded to the work of their venerable friend, Mr. John Tomes, whose name would be known over the whole scientific world for his valuable work as an anatomical and physiological investigator, and revered by his brother dentists as the champion and pioneer of dental reform. They sought to make the dentist an educated and scientific man, and they would have him pass an examination in arts identical with that formerly demanded of the student of medicine alone. They required an apprenticeship of three years to a registered and qualified practitioner, and a three years' course of hospital study in medicine and surgery, as well as courses on special dental subjects in a dental hospital. This was at last granted by the College of Surgeons, and a curriculum of study marked out. In 1878 they obtained the Dentists Act, which demanded registration of all persons practising dentistry. Another great evil of the dentistry of the past was the advertisements of the quacks. The College of Surgeons demanded of their licentiates a solemn undertaking that they would not advertise or associate their names with anyone who did. It was to be regretted that dental advertisements and show-cases still appeared to disgrace their profession. The objects of the British Dental Association included not only the study of dental and the allied sciences, the maintenance of the honour and interests of the profession, and the publication of a periodical journal, but the upholding of the spirit and provisions of the Dentists Act. It seemed to him that one great difficulty of the administration of that Act lay in the constitution of the General Medical Council, which had the supervision of registration and was the chief authority. It would not do for them to advocate the abolition of the House of Lords; but it was certainly open to grave consideration whether it would not be to their advantage if it were more representative—i.e., if taxation and representation were more proportionate. They had those amongst them who were earnest workers in the field of science. It was known that bacilli and micrococci had been found in the mouth and in the tissue of decayed teeth, as also in the alveolar abscesses; and when it was recognised how rapidly they multiplied, it would be seen how important a bearing they had on dental diseases. It had been held that the human race was deteriorating in physical, if not in mental power. Models were constantly exhibited which proved that jaws were becoming more and more contracted; that wisdom, bicuspid, and lateral teeth were often absent; and that even the teeth which were present were not nearly so good as they used to be. The President concluded by welcoming the members to Nottingham.

Dr. SMITH moved a vote of thanks to the President, which Mr. STORY (Hull) seconded. The motion was carried.

In the afternoon Mr. Marshall read a paper on "Nutrition in Early Life"; Mr. F. Harrison a paper on "The Preparation of Tissues for Microscopical Examination"; and Mr. L. Matheson one on "Artificial Separation of Teeth."

This concluded the meeting, and in the evening the members dined together at the George Hotel.

MAHOMED MEMORIAL FUND.

A MEETING of the subscribers to this fund was held in the Governors' Court Room, Guy's Hospital, on Thursday, April 16th. Dr. S. Wilks, F.R.S., took the chair, and explained the steps which the subcommittee had followed to carry out the resolutions of the meeting held at Guy's Hospital in December last. Mr. Durham, the treasurer to the fund, stated that the amount subscribed slightly exceeded £2500, of which sum all had been received except about £295. It was then proposed by Mr. Durham, seconded by Dr. F. Taylor, and carried unanimously, "That the fund subscribed be entrusted to three gentlemen, to be hereinafter elected, who shall have full and absolute power to invest, hold, and dispose of the money placed in their hands, both as regards capital and the interest that shall accrue upon it, at their discretion, in such way as may seem in their judgment best calculated to promote the interests of those left by Dr. Mahomed and to fulfil the objects for which the fund has been subscribed, subject to the following conditions:—(1) "That during the lifetime of Mrs. Mahomed, and while she remains unmarried, the interest upon the fund shall be regularly paid to her for her use; (2) that, if at any time it may seem good to them, the trustees may dispose of portions of the capital for the immediate use or benefit of Mrs. Mahomed or any one of the children, provided always that no larger sum than one-quarter of the capital be given to Mrs. Mahomed for her own use, nor any larger sum than one-fifth or three-quarters of the capital sum be expended upon any one of the five children, except in case of the death of any one or more of the children, under which circumstances a proportionately larger share may be appropriated to any one or more of the survivors."

Mr. Eastes proposed, Mr. Aiken seconded, and it was unanimously resolved, "That in accordance with the foregoing resolution, Dr. Cayley, Dr. Goodhart, and Mr. Field be requested to take charge and dispose of the money subscribed; and, in the event of the death or resignation of any one of these gentlemen. the remaining two shall appoint a new trustee." It was proposed by Mr. Lushington, and carried, "That the report of this meeting, and the resolutions adopted, be forwarded to the medical journals and also to each of the subscribers to the fund, with a complete list of the subscriptions." Votes of thanks to the subcommittee, to the treasurer of the hospital, and to the chairman of the meeting, brought the proceedings to a close.

The following additional subscriptions have been received:

	£	s.	d.		£	s.	d.
W. A. Alkin, Esq.	1	1	0	T. A. Ives-Howell, Esq.	3	3	0
R. W. Brogden, Esq. ...	2	2	0	Hugh R. Ker, Esq.	1	1	0
Percy H. Garner, Esq. ...	1	1	0	J. V. Salvage, Esq.	1	1	0
T. S. Howell, Esq.	5	5	0				

The Treasurer and Secretaries wish to express their cordial appreciation of the courtesy and kindness that have been shown by the Editor of THE LANCET in inserting notices relative to the fund, and in thereby much promoting its success.

ARTHUR E. DURHAM, Treasurer.
JAMES F. GOODHART, } Secretaries.
W. H. A. JACOBSON, }

SOUTH LONDON SCHOOL OF PHARMACY.—The following prizes were presented to the successful competitors at the school examinations (held from April 7th to 11th) on Wednesday last:—Senior Chemistry: David Kingan, medal; John G. Rowell, certificate. Junior Chemistry: Thomas C. Barkas, medal; Ernest A. Long, certificate. Botany: David Kingan, medal; Ernest Daintree, certificate. Materia Medica: Ernest Daintree, medal; Thomas C. Barkas, certificate. Pharmacy and Practical Dispensing: Ernest A. Long, medal; Jeremiah Burgess, certificate. Extra Certificates of Merit: Messrs. Carr, Fulcher, Moore, Pyle, Reedman, Robinson, and Tirrell.

WILLS OF MEDICAL MEN.

THE will of Mr. John Charles Parrott, late of Clapham-ommon, surgeon, who died on January 31st last, was proved n the 4th ult. by Mrs. Maria Parrott, the widow and sole xecutrix, the value of the personal estate amounting to pwards of £62,000. The testator bequeaths his household urniture and effects to his wife; £10,000 each to his son lfred Albert and his daughter Julia Isabel; £10,000 upon rust for his daughter Mrs. Annie Walter; £5000 to his son ohn Charles; and some other legacies. His freehold esidence, and the residue of his shares, bonds, insurance oney, and cash at his bankers, are to be held upon trust r his wife for life, and then for his two daughters and his on Alfred Albert.

The will and codicil of Thomas Derry Jones, M.D., late of , Loraine-place, Holloway, and 328, Upper-street, Islington, ho died on January 21st last, were proved on the 20th ult. y Ralph John Dent, J.P., and John Chalmers, M.D., the xecutors, the value of the personal estate amounting to ver £12,000. The testator bequeaths legacies to his xecutors, coachman, and others; £1000 each to Ada and ane Kipling, and £500 to Bessie Mitchell, the payment f these three latter legacies being postponed until the death f his mother. Subject to the foregoing bequests, the estator leaves all his property to his mother.

The will and codicil of Mr. William Coulthard, surgeon, ormerly of 42, Hertford-street, Mayfair, but late of 49, ueen's-gardens, Hyde-park, who died on January 27th last, ave been proved by Henry White and John Coulthard, the xecutors, the value of the personal estate amounting to ver £8500. The testator leaves £100 per annum for the enefit of his sister Mrs. Clara Ann Farmer; £100 to each of is executors; and the residue of his real and personal state to his three half-sisters, Phœbe, Jane, and Frances oulthard.

The will of John Collis Browne, M.D., late of Mount lbion House, Ramsgate, and of 11, Sandringham-gardens, aling, who died on August 30th last, has been proved by Mrs. Harriet Browne, the widow and sole executrix, the alue of the personal estate amounting to over £4700. The estator gives all his real and personal estate to his wife bsolutely.

The will of Mr. Forster Fowler Martin Maynard, physician nd surgeon, late of Kemendine House, Baldslow-road, Hastings, who died on January 1st last, was proved on the th ult. by Mrs. Charlotte Harriett Maynard the widow, Mr. Edward Garnet Man and Mr. Lionel Booth, the executors, he value of the personal estate exceeding £800. The estator gives his household furniture and effects to his wife, and confirms the assignment to her of his life ssurance policy; and complimentary legacies to Mr. Man and Mr. Booth. The residue of his real and personal estate s to be held upon trust for his wife, so long as she shall live without marrying again, and then to be equally divided etween his children.

The will of George Ridsdale, M.D., late of 26, Endsleigh-gardens, Euston-road, who died on November 11th last, was proved on the 20th ult. by Mr. Alexander Greaves, the acting executor. The testator leaves all his real and personal estate upon trust, the income to to paid to his wife for life, and then to his god-daughter, Ethel Fanny Graves.

The will of William MacOubrey, M.D., barrister-at-law, formerly of 50, Charlotte-street, Fitzroy-square, but late of Oulton, Suffolk, who died on August 24th last, was proved on the 13th ult. by Mrs. Henrietta Mary MacOubrey, the widow and sole executrix, to whom he leaves, devises, and bequeaths all his real and personal estate, to be at her own disposal.

The following legacies have recently been left to hospitals and other medical charities:—Mr. Nathaniel James Powell, of Devonshire House, Beckenham, £250 to the Royal Hospital for Incurables, Putney; and £100 each to the London Hospital, Whitechapel-road, the London Hospital, Victoria-park, and the Eastern Dispensary, Leman-street.—Miss Sarah Ward, formerly of Leicester-place, Camberwell New-road, but late of Carshalton-grove, Sutton, £500 New Three per Cents. each to the Brompton Hospital for Consumption and Diseases of the Chest, and the Victoria-park Hospital for Consumption and Diseases of the Chest.—Mr. John Christopher Augustus Voelcker, of 39, Argyll-road, Kensington, analytical chemist and Doctor of Philosophy, £100 each to University College Hospital, and the German Hospital, Dalston.—Mr. William Danby Baker, of 385, Kennington-road, on the death of Miss Charlotte Clarke, one-third of £3000 Consols each to the British Home for Incurables, Clapham, and the Royal Hospital for Incurables, Putney.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 6195 births and 3966 deaths were registered during the week ending the 18th inst. The annual death-rate in these towns, which had increased in the previous six weeks from 20·6 to 25·0, declined again to 23·2. During last quarter the death-rate in these towns averaged 21·9 per 1000, and was 2·3 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 16·2 in Hull, 16·3 in Derby, 17·8 in Nottingham, and 17·9 in Birkenhead. The rates in the other towns ranged upwards to 32·4 in Newcastle-upon-Tyne, 33·9 in Sunderland, 33·3 in Cardiff, 35·7 in Plymouth, and 35·9 in Manchester. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding seven weeks from 377 to 478, further rose last week to 484; they included 190 from measles, 109 from whooping-cough, 46 from small-pox, 42 from "fever" (principally enteric), 38 from scarlet fever, 30 from diphtheria, and 29 from diarrhœa. No death from any of these diseases was recorded last week in Wolverhampton, whereas they caused the highest death-rates in Cardiff, Newcastle-upon-Tyne, and Sunderland. The greatest mortality from measles occurred in Newcastle-upon-Tyne, Cardiff, and Sunderland; from whooping-cough in Preston and Sunderland; and from scarlet fever in Halifax and Sunderland. The 30 deaths from diphtheria in the twenty-eight towns included 21 in London, and 2 in Portsmouth. Small-pox caused 67 deaths in London and its outer ring of suburban districts, 2 in Liverpool, 2 in Manchester, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had risen in the preceding three weeks from 830 to 910, had further increased to 1062 on Saturday last; the admissions also further rose from 179, 141, and 185 in the previous three weeks to 307 last week, the largest number under treatment since June last. The Highgate Small-pox Hospital contained 92 patients on Saturday last, 23 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 448, 478, and 512 in the preceding three weeks, declined again last week to 449, and were 21 below the corrected weekly average. The causes of 101, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Sunderland, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Hull, Blackburn, Sheffield, and Huddersfield.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 25·0 and 23·4 per 1000 in the preceding two weeks, was 23·3 in the week ending the 18th inst. The rates in the Scotch towns last week ranged from 14·8 and 18·3 in Greenock and Perth, to 27·1 in Glasgow, and 29·0 in Paisley. The 569 deaths in the eight towns included 24 from measles, 23 from whooping-cough, 12 from diarrhœa, 7 from "fever," 7 from scarlet fever, 3 from diphtheria, and not one from small-pox; in all, 67 deaths resulted from these principal zymotic diseases, against 84 and 68 in the preceding two weeks. These 76 deaths were equal to an annual rate of 3·1 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The 24 deaths from measles corresponded with the number in the previous week, and included 22 in Glasgow. The fatal cases of whooping-cough, which had been 34 and 17 in the preceding two weeks, rose again to 23 last week; 8 occurred in Edinburgh and 6 in Glasgow. The 7 deaths referred to "fever" showed a decline of 3 from the numbers in the previous week and included 3 in Glasgow and 2 in Dundee. Of the 7 fatal cases of scarlet fever 5 occurred in Glasgow and 2 in Paisley; and 2 of the 3 deaths from diphtheria were returned in Dundee. The 12 deaths attributed to diarrhœa included 6 in Glasgow, and were 3 below the number in the corresponding week of last year. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 130 and 134 in the previous two weeks, were 131 last week, and exceeded the number in the corresponding week of last year by 3. The causes of 73, or nearly 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 40·4, 33·6 and 33·2 per 1000 in the preceding three weeks, was last week 33·7. During last quarter the death-rate in the city averaged no less than 34·0 per 1000; whereas in London and Edinburgh the rate did not exceed 20·8 and 20·0 respectively. The 228 deaths in Dublin last week showed an increase of 10 upon the number in the previous week, and included 29 which were referred to the principal zymotic diseases, against 32, 24, and 29 in the preceding three weeks; 15 resulted from measles, 8 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 2 from whooping-cough, 1 from diphtheria, and not one from either small-pox or diarrhœa. These 29 deaths were equal to an annual rate of 4·3 per 1000, the rates from the same diseases not exceeding 3·0 in London and 2·1 in Edinburgh. The fatal cases of measles in Dublin, which had been 13 and 19 in the previous two weeks, declined again to 15 last week. The 8 deaths from "fever," however, showed a marked increase upon recent weekly numbers. The fatal cases of scarlet fever were also more numerous. Five inquest cases and 5 deaths from violence were registered. The 80 deaths in public institutions were more than a third of the total deaths recorded. The deaths of infants showed a further decline, while those of elderly persons exceeded the numbers in the two previous weeks. The causes of 20, or nearly a tenth of the deaths registered, were not certified.

Correspondence.

"Audi alteram partem."

STRANGULATED OMENTAL HERNIA.

To the Editor of THE LANCET.

SIR,—The interesting letters by Mr. Timothy Holmes and Mr. Parker, published in your issue of April 11th, revive once more the question of the due appreciation of strangulated omental hernia. Mr. Parker denies a clinical being to this form of rupture, and contends that, so far as a symptomatic outline is concerned, it is without form and void. In spite of the undoubtedly strong arguments so ably advanced by Mr. Parker, I would still venture to place myself among those who adhere to the ancient surgical faith, and believe that a strangulated epiplocele will be attended with the same symptoms, in a modified form, that follow the strangulation of bowel in a rupture. The disposal of the question must rest at present upon individual experience and impression. It will be answered when Mr. Parker's arguments have been supported or opposed by more extended clinical data, and when they have met fully the test of the post-mortem room. So far, Mr. Parker has clearly demonstrated that a serious fallacy may exist in the diagnosis of strangulated epiploceles, and it would be at present difficult to maintain that this fallacy has not crept into all reputed cases of strangulated omentum with symptoms. The point, however, has rather a negative than a positive value; it shows that certain cases have been wrongly diagnosed, but it still does not dispose of the main question, nor touch the possibility that certain precise symptoms may follow the strangulation of a portion of omentum. It would appear that in the discussion too little notice has been taken of the important part the abdominal nerve centres play in the production of strangulation symptoms. It will, I presume, be allowed that the omentum contains nerves, and that these nerves are derived more or less directly from the great solar plexus. These nerves must obviously be damaged when the omentum is compressed, and as it can be shown that strangulation symptoms may follow upon a like lesion to other offshoots from the great plexus, it will not be unreasonable to expect that strangulation of omentum alone may be attended by the same clinical manifestations. The almost immediate pain, collapse, and vomiting that attend acute volvulus of the sigmoid flexure can hardly depend, in the first instance, upon the mechanical obstruction in the bowel, but are due rather to the impression conveyed to the solar plexus from the damaged nerves in the twisted gut. The earliest symptoms also in Littré's hernia must be explained by a reference to sudden nerve impressions rather than to a mechanical obstruction, since the lumen of the bowel is not entirely occluded, and an immediate paralysis of the ensnared part could hardly meet the manifestations produced. The collapse, deep abdominal pain, and copious vomiting that often attend crush of the testes would appear to depend upon damage to the spermatic plexus—a close derivative from the solar. The same applies to instances where in infants orchitis of an undescended testis has given rise to symptoms hardly to be distinguished from those of strangulation. In several instances, and notably one recorded by Dupuytren, an inflamed hydrocele has been mistaken for a strangulated rupture; and other cases may be mentioned where the leading symptoms of acute obstruction have followed a lesion of a limited part of the peritoneum. In the light of such instances, it may be expected that damage to the peritoneum forming the omentum would not improbably lead to such disturbances as slight shock, abdominal pain, vomiting, and constipation.

An important argument now comes to the front. "I continue," writes Mr. Parker, "unshaken in the firm conviction that strangulation alone, as strangulation, can have no symptoms, seeing that the tightest ligature never produces them." I venture to think that this ingenious argument involves a fallacy. The two forms of constriction alluded to are not identical. Mr. Parker will agree with me that certain lesions are measurable in a surgical sense. There is a lesion which when of light degree may cause severe irritation and widely diffused nerve disturbance, and which when of intenser character may cause more or less abrupt death of parts and lead to none but local manifestations. Many illustrations of this are afforded by surgery. In spontaneous strangulation of omentum the nerves are compressed, but not at once destroyed. They remain, as it were, alive under the keenly constricting band, and become the starting-point for widespread disturbance. In the case of the ligature, the parts enclosed within the thread are practically killed outright, the nerves are crushed, and their conducting power destroyed. The lesion would appear to be, and to remain, purely local. From a neighbouring part a nearly parallel example may be taken. A bunch of internal piles descend, and are nipped by the sphincter. The ensnared part is not killed outright, it may survive for days, and it becomes the seat of intense irritation leading to the most grave disorders. The same phenomena do not appear when the same piles are subjected to the surgical ligature, and I do not think that Mr. Parker would deny that symptoms attend strangulated piles because ligation of those piles is not followed by identical disturbances.

I am, Sir, yours truly,

Golden-square, April 17th, 1885. FREDERICK TREVES.

REFORM AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—Your leader of this week calling attention to the general meeting of the Association of Members of the College of Surgeons must be very pleasing to Members of the College who already have joined together in large numbers, and are exerting themselves energetically to obtain from the College some sort of recognition. There is only one passage to which I wish to call attention. You say "There is difficulty in carrying out the programme drawn up by the Association, and the burden of showing how these difficulties may be overcome lies with the Association." Now, Sir, in my opinion, when any business firm, or even corporate body, is desirous of contributing to the interests of the public at large, and of removing a grievance known to exist, the public is not called upon to point out to the firm or corporate body how they are to conduct their own affairs in order to remedy the evil complained of. It may as well be argued that a medical man having a long round of visits before him may refuse to attend an urgent message unless and until this patient first points out how the day's work can be satisfactorily gone through. Surely such interference would be laughed at and treated as an act of impertinence. I am of opinion that this applies equally to the College of Surgeons, and that it rests with the Council to consider how to advance the interests of the members when once the latter have made known their grievances and desires.

I am, Sir, your obedient servant,
M. CLIFFORD, M.R.C.S. Eng.
Warrington-gardens, April 22nd, 1885.

The following letter has been addressed to the Honorary Secretaries of the Association of Members of the Royal College of Surgeons of England:—

Dulwich, April 21st, 1885.

DEAR SIRS,—In reply to your invitation to attend a meeting of the Association of Members of the Royal College of Surgeons of England on May 5th, I am afraid that, as I do not approve of the separation of Fellows and Members into hostile camps (for which, I am bound to say, your Association is not wholly responsible), my presence at your meeting would hardly help you, unless indeed you are prepared to take steps for co-operating with the Association of Fellows, in which case I would gladly assist. It appears to me, as I believe it does to others, that the resolutions passed at the meeting held at the College in March, 1884, afford a basis on which Fellows and Members *ought to be* able to work for the common good. Those resolutions asked, *inter alia*, for the following important reforms:—(1) That the Fellows and Members should be invested with a larger share in the management of the College; (2) that no important alteration should be made in the constitution or relations of the College without the consent of the Fellows and Members; (3) that there should be an annual meeting of Fellows and Members, at which the annual report of the Council should be presented, received, and adopted. Had the Fellows and Members, since the meeting unitedly adhered to this moderate programme, there can, I think, be no doubt that the Council would have been ere this forced to yield; but dividing into two Associations, each bent upon securing as much for its own order as possible, the interests of the profession fell an easy prey to those who believe in the ancient maxim, *divide et impera*, and the Council of the College has been able for a whole year to act as if it had never accepted any of these proposals, not even the third, in a modified form, or as if its acceptance of that proposal was one of those inoperative resolutions which Mr. Marshall told us the Council is in the habit of passing. As there may possibly be some both in your own Association and among the Fellows who will agree with me in thinking that our true policy, in view of the determined hostility of the Council and officials of the College to all reform, should be to seek union *rather than* to divide our powers, I shall send a copy of this letter to the medical papers.

I am, dear Sirs, faithfully yours,
H. NELSON HARDY.
The Hon. Secs., Association of Members, Royal Coll. Surg., Eng.

THE CHELTENHAM APPOINTMENT OF MEDICAL OFFICER OF HEALTH.

To the Editor of THE LANCET.

SIR,—As one of the candidates for the above appointment. allow me to thank you for the paragraph in your last issue, In addition to the fact, which you lay stress upon, that Mr. Roch possessed only one qualification at the time of his appointment, there are other objections to the election, which it is well the thirty-four candidates should know.

1. The advertisement required that applications for the office should state age, residence, and *qualifications*. The gentleman elected did *not* state his qualification (M.R.C.S., [illegible]), but merely added to his name Deputy Surgeon-General.

2. The notification to the Local Government Board, instead of being made within seven days, was delayed by the Sanitary Authority (or rather, as it really was, the Mayor and Town Clerk) for three weeks, during which time the gentleman elected obtained, after *special* examination of an [illegible] character only, and for which no curriculum is required, a [illegible] in medicine from a college in Ireland, the value of which, as you rightly say, "can best be judged of by the circumstances under which it is procured."

3. One of the applications for the office was never opened or considered. There can be no doubt that this election was conducted in a slovenly manner. The Public Health Committee and the Town Clerk (to whom a selection of six candidates was delegated) appear never to have considered the qualifications of the several applicants, the Town Clerk ruling that this was only necessary in the case of the elected one, the consequence being that the majority of the Town Council, in voting for Mr. Roch, thought they were supporting a gentleman at least as well qualified as the other five candidates, and his want of legal qualification was *never discovered until after his election*; *further, if one* application was never opened, the inference is that others shared the same fate.

I am *pleased to find that several of the candidates* contemplate taking further action, and I shall be glad to join in any movement for testing the legality of the appointment. The best thing, however, in my opinion, would be—if I might venture to suggest such a course—for the gentleman elected to resign and submit his claims, now that he is fully qualified, for re-election.

I am, Sir, yours faithfully,
A GRADUATE.
April 20th, 1885.

THE MEDICAL BILL AND THE SCOTCH UNIVERSITIES.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct a mistake into which I fell in my letter of the 14th inst.? I find on reference to the journals of the House that the Medical Act Amendment Bill was exempted in the first instance from the general massacre of the innocents, and was only withdrawn at a later date, when it became evident that it would be hopeless to attempt to do anything beyond absolutely necessary work in an expiring session. I feel that this explanation is due to Sir William Jenner, whose knowledge of the detail of the question was really greater than mine, but from whose conclusions I still venture to dissent; and whilst thanking you, Sir, for your personal expressions of courtesy, I must, with all respect, continue to express my dissent from the views which you so ably advocate.

I am, Sir, yours faithfully,
R. FARQUHARSON.
Reform Club, April 22nd, 1885.

SMALL-POX AT SALVATION ARMY BARRACKS.

To the Editor of THE LANCET.

SIR,—In THE LANCET of last week a correspondent states that small-pox is now, and has for some time past been, very prevalent among the persons residing in the barracks of the Salvation Army, Clapton, and that scarcely a day has passed without some patient being removed. This is absolutely untrue. Since the barracks have been opened at Clapton, three years ago, there have been in all twelve cases; seven this year, three in 1884, and two in 1883. Every care is taken to prevent infection spreading; on the slightest suspicious symptom the cadet is isolated (in a room kept on purpose for infectious cases), and as soon as small-pox is pronounced the patient is at once removed to the hospital at Highgate. Every precaution as regards disinfection is taken after a case has occurred. So far there has been no spread of the disease in the barracks, the cases being isolated ones. In one case the disease was evidently caught at Plymouth, as symptoms of small-pox appeared within a week of the patient's arrival at Clapton. A matron and a certificated hospital trained nurse have the cadets under their constant supervision, and are prompt in isolating any one showing the slightest suspicious symptom of any infectious disorder; and, *considering* the number of persons residing in the barracks (over 300), and how prevalent small-pox has been in the immediate neighbourhood, in my opinion the army is to be congratulated *that there have not* been more cases. Either the matron, the nurse, or the medical officer, will be very happy to show any qualified medical man over the barracks.

I am, Sir, yours faithfully,
FRED. H. [illegible], M.D.,
Lower Clapton, April 21st, 1885. Med. Off. [illegible] Salvation Army.

WITH THE TROOPS IN THE SOUDAN.

(From our Special Correspondent.)

Base Hospital, Camp near Suakim, March 27th, 1885.

Since yesterday week there have been constant skirmishes with the enemy, but that of Sunday last was by far the most severe, even critical, action that has taken place; for it was one in which the Soudanese made a most determined attack on our zereba and troops, and were not repulsed until they had managed to put some 250 of our men (killed and wounded) *hors de combat*. Conflicting as the reports are which are heard from all quarters as to how this loss was occasioned, the opinion of most of those I have seen and spoken to on the subject, and who were eye-witnesses of, participators in, and also sufferers by the fight, may be summed up in a single word—Surprised! That for a time it was a disaster is certain, and a palpable disaster into the bargain—a second Isandhlwana affair, averted only by the coolness and steady bearing of our English troops. It appears that the forces under the command of General McNeil had started on the morning of Sunday, the 23rd, to form a zereba and establish a position on the line of communications a few miles out for the general advance of the main body of our troops, which intended to move a few days afterwards for Tamai *en route* to Berber. The troops, consisting of the Berkshire Regiment, Marines, Sappers, Sikhs, 17th Bengal and 28th Bombay Native Infantry, with some mounted infantry and a small body of the 5th Lancers, and some thirty-two Blue-jackets, had reached a spot five miles and three-quarters S.S.W. from the camp, quite unmolested by the enemy, and were there halted, for the purpose of making a zereba out of the bushes growing in the immediate locality. At this time the camels and mules carrying water and provisions, with their Indian and Maltese drivers, had not yet reached the *locale* selected for the camping ground, but were coming up in detachments and groups, the line of their somewhat irregular formation extending a considerable distance in the rear. The mounted scouts were out searching for the rebels; and so much security from any sudden attack was felt by those in command, that the men's arms were piled and the ammunition placed outside the half-finished zereba in one spot, whilst many of the Sappers were unarmed, cutting brushwood, some 400 yards away in another. The greater number of the soldiers thus employed were in their shirt-sleeves, and possessed no weapons of defence save the spades and pickaxes they had in their hands. Working under the scorching rays of a vertical sun, they little dreamed their foe was so near them. At this juncture an alarm was raised, the mounted scouts giving notice of the enemy's presence and rapid approach upon our position and half-finished zereba; but the warning was not in sufficient time to avert the disaster that speedily followed; nor could any means be taken to check the on-rush of their impetuous charge before many of their brave fellows had not only reached, but gone clean through, the British half-formed square. Fleet of foot—their speed even exceeding that of our troopers' horses—and courageous as lions, on they came bounding, yelling horribly, and brandishing their spears and sharp-edged swords. Their onslaught was so unexpected and so determined that, for a few minutes at least, everything seemed to fall beneath their vigorous and well-timed attack. Amidst a scene of the wildest confusion, and enshrouded in a towering column of thick dust that arose on all sides, our men were rushing here, there, and everywhere but in the right place—of course, to search for and regain possession of the arms left far away from them at the commencement of their work. What followed will long be remembered by those who have been spared, but who were unfortunate enough to have taken part in this most calamitous affair. Camels, cut loose, and disembowelled by the fiends creeping beneath them and ripping open their abdomens with short curved swords, were racing in maddening agony over the plain; whilst riderless horses and mules, whose unarmed keepers and attendants had by this time all been shot or speared by the Arabs, were kicking up their heels and scampering away in all directions, making confusion worse confounded by their snorting and hideous noises. Half-dressed semi-armed men were (hotly pursued by the foe) making for points where rallying squares could be formed by their officers; whilst fugitives—press correspondents among them,—better mounted than the rest, and unable to get within the squares, were seeking the more congenial safety of strategical retreat in a racing dash for it across country in the direction of Suakim and the entrenched camp some five miles in the rear. The 17th Bengal Infantry, unable to withstand the impetus, commenced falling back in disorder, whilst officers, men, and camp-followers were on all sides trying to get within the shelter of the forming square. One officer, a member of the medical profession, unarmed, lost his horse under him, and at the same time saw his servant and also his orderly shot dead by his side. Seizing an axe, in the absence of sword, revolver, and ammunition, he laid it about him with such dexterity and effect that he kept his antagonists at bay, got within the square, and, happily unscathed, came into camp with the wounded next day. A small unfinished sand-bag redoubt occupied by the Naval Brigade, under the command of Lieutenant Seymour, suffered terribly. Out of the nine persons there, six were killed, one was wounded, and two escaped. Poor Seymour's body presented a shocking spectacle of spear and sword wounds. Pen cannot describe the doings of that momentous Sunday forenoon's work. To avert an overwhelming calamity something had to be done, and that very speedily too. The Berkshire Regiment, the Marines, as well as the brave Sikhs, were equal to the occasion, and proved true to the core. By their steadiness and bearing under most trying circumstances the enemy were for a few minutes held in check, and some order was restored. Our boys, rallying, fell into something like fighting position, and, standing shoulder to shoulder, poured in such a destructive and deadly hail of bullets upon the advancing line of these poor fanatical, yet withal bravest of the brave, savages, that the battle was saved and the day won, and the dark legions of Osman Digna were hurled back once more to the limited shelter of the mimosa-bush, whilst the withering fire of our marksmen strewed the yellow sand with corpses, and reddened its surface with the blood of the wounded and slain. Twenty minutes' action, and the fight was over. In that brief space of time what blood had been spilt and what treasure had been lost! Rifles, spears, and swords had done their murderous work so well and so effectively that the ground was strewn with the mangled and slain, whilst a death-roll of 118 and a list of wounded to the extent of 160 men on our own side testify to the impetuous and desperate character of this affray.

A camel train of about 1000 strong a few days ago is now a thing of the past, whilst it would commercially repay any man of energy and strong nerve—if utterly regardless of his own life—to make an excursion from here to the zereba, and collect the transport boxes, water barrels, &c., scattered along the line of retreat of our poor unarmed and scared camel and mule drivers, who, on the first rush and surprise, were forced to desert their charges, seek some protection, make for some place of safety, and leave their costly articles of commissariat to the tender mercies of a temporarily victorious foe.

Many are the gunshot wounds amongst the wounded, yet the enemy are supposed to have but few rifles (Remington's), and these were secured at the defeat of Hicks's army; but those they possessed must have been used with an accuracy of aim and precision of fire unprecedented in the records of target practice; whilst the extraction of some Martini-Henry bullets from our men cannot be explained except on the presumption that the enemy are already in possession of a fair supply of these more modern, invaluable, and long-range weapons. Sunday's fight has already taught one lesson—that our camel and mule drivers must no longer be permitted to go without weapons, for one can well understand the hesitation (begotten of no spirit or unmanly fear) shown by these unarmed followers to accompany the force again, unless better protected on their flanks and in their rear, with the prospect of provoking a conflict in which they are certain to find themselves worsted by so active, so well armed, and implacable a foe.

To the chivalry of our own men alone can be ascribed the success of Sunday's fight, at one time so doubtful. Soudanese mothers, wives, and relatives have now to mourn the loss of about 2000 warriors, lying bleached and decomposed on that gory, trampled plain. Such are the results of this horrible war, and such the outcome of that religious fanaticism which carries these poor creatures to their desperate fate, and urges them heedlessly on to their inevitable doom. But what of 'Christian chivalry, supposed to be so characteristic of our time and age? If it in any way influences men to do their duty whenever and wherever they may be sent, does it not also make them shudder at times, when called upon in the performance of that duty, to mow down in hundreds, nay in thousands, such brave misguided fanatics; because we are invading, they as-patriots (they are in reality such) are defending their own country and her most uninteresting cause? England's bravest deeds in this unhappy land were well unwritten indeed; the best results, the most brilliant achievements, will carry little weight with them hereafter; and when sufficient blood has been poured out and treasure lost, the *finale* will be discouraging enough to stamp with a big blot those pages of England's military history in this sun-scorched land. Besides the 118 killed amongst our naval and military officers and men, about 300 or more of our Indian coolies and European mule and camel drivers and attendants are missing since the disastrous Sunday's engagement. About the fate of these poor fellows there can be but one opinion—all slain to a man. The enemy gives no quarter whatever.

But enough of this: let me for a moment turn to the brighter and philanthropic side of this dismal and bloody picture, and say a word or two about the sick and wounded. Being an eye-witness of what took place (down at the excellently arranged Base Hospital) on the Monday after the fight, I am able to show you every possible contingency was provided for; how faithfully a small band of skilful surgeons, under the direction of Brigade-Surgeon Tanner, provided for the reception and comfort on arrival of those stricken down in yonder plain; how, though these poor wounded men came into camp late in the evening, they were received with humanity and every possible care; how each medical officer during the previous afternoon had received a notification to have ready a supply of hot coffee and beef-tea, brandy-and-water to be given to each patient after being placed in nice clean soft beds. Nothing could be better than the arrangements made by the medical staff on behalf of the poor sufferers.

Up to this date, March 27th, since the establishment of the Base hospital at H redoubt, there have been 137 admissions; of this number 64 have been transferred to the *Ganges*, and five have died, three from wounds received in action and two from sunstroke. The rest remain under treatment. Of amputations performed, there have been four arms, four fingers, one thigh, and one leg. Of these only one has died after operation. The previous admission list does not include marines and sailors; of these twenty-seven have been received, one of them dying from gunshot-wound in the thigh. Up to date there have been eight cases of severe sunstroke, and of these, as before mentioned, two have died.

Before closing this letter I may mention that several of the Sisters under the superintendence of Miss Ireland have arrived, and are severally located at the Base Hospital, *Ganges*, and auxiliary depot. They look remarkably well after their sea trip. Their presence seemed to quite cheer up the poor wounded and sick fellows. I sincerely trust they may stand this climate. Temperature in the shade 80°, in the sun 94°. The nights are cool and pleasant.

The following is the disposition of the medical staff:—

Surgeon-General O. Barnett, principal medical officer at Headquarters Camp.

Surgeon-General G. L. Hinde, superintendent at Base, H. Redoubt, and Quarantine Island.

Surgeon-Major J. Warren, sanitary officer, Headquarters Camp.

Surgeon-Major H. Tanner, sanitary officer, Base and H. Redoubt.

Surgeon-Major J. B. Hamilton, field inspector detailed for hospital organisation on line of communications.

Surgeon-Major H. Tobin, operating surgeon at Base and H. Redoubt.

Surgeon-Major A. Allan, registrar at Base and H. Redoubt.

Surgeon-Majors at Base Hosp., H. Redoubt: T. W. Patterson, J. G. Barrow, S. K. Cotter.

Surgeon-Majors at Stationary Field Hospital: H. H. Stokes, G. Carey, J. J. Cream.

Surgeon-Majors, Hospital Ship *Ganges*: H. Gribbon, E. P. [illegible].

Surgeon-Majors at Guards' Hospital (their own): H. J. [illegible], A. R. Meyers, C. C. Beal. 4th Guards' Field Hospital: S. G. Robinson.

Surgeon-Majors and Surgeons to 1st Field Hospital: J. H. [illegible], F. Kingston, W. J. Rourke.

Surgeon-Majors and Surgeons to 2nd Field Hospital: J. Flemming, H. L. Donovan, R. Smith, S. G. Freyer.

Surgeon-Majors and Surgeons to 3rd Field Hospital: H. J. Riordan, H. Bates, H. N. Johnston, N. Maunders.

Surgeon-Majors and Surgeons to No. 1 Bearer Company: H. J. Wilson, J. R. Collins, C. Bert.

Surgeon-Majors and Surgeons to 2nd Bearer Company: E. J. H. Evatt, W. Keys, R. J. D. Hackett.

Surgeon-Major Cream (sanitary), at Base.

Sixteen other surgeon-majors and surgeons attached to their various regiments; also two naval medical officers doing duty on shore. In addition, Professor Ogston and myself.

The following cases, which came under the care of Surgeon-Major Samuel Kyle Cotter, are worthy of record:—

Gunshot Wound; Fracture of Arm; Amputation.—Private E. C——, Royal Marines, was wounded on March 20th by a bullet which passed through the middle of his left arm, shattering the bone upwards and downwards for about the space of four inches. On the 21st, under ether, examination revealed the hopeless shattering of the bone, and amputation was performed by Surgeon-Major Tobin at the junction of the middle and upper thirds. The temperature before operation was 99·1°, and soon after it fell to 98°. The operation was by anterior and posterior flaps, and the bone was sawn at about three inches below the head, up to which point splintering existed. A drainage-tube was placed through the wound at the outer angle, and the whole dressed antiseptically. He was restless all day, but the pulse did not rise beyond 88. At 9.30 P.M. one-third of a grain of morphia was injected hypodermically, and he passed a very fair night. On the morning of the 22nd the temperature was 99·2°, the pulse 96. Since the operation there had been difficulty in passing urine, and the catheter was required. In the evening of the 22nd the temperature was 99·8° and the pulse 93. On the 23rd the dressings were renewed, and the wound showed a tendency to heal by first intention. Temperature 99·2°; pulse 80; bowels confined. To have an enema of sulphate of magnesia at once. Catheter still required. In the evening of the 23rd the temperature was 100·2°, and the pulse 84, with a tendency to hardness.—24th: Temperature 99·2°; pulse 79, and hard. Not a good night; but little pain in the stump now. Evening temperature 100°; pulse 78; urine passed freely.—26th: Dressings and drainage-tube removed, and the stump again dressed under carbolic spray. Union by first intention established almost throughout. On this day he was cheerful and able to sit up, and was transferred in the evening to the hospital ship *Ganges*.

Sunstroke.—No. 73, Corporal (name unknown), Royal Engineers, contracted sunstroke during the action of the 20th of March, and was brought to the Base Hospital at 6 P.M. on the 21st. He lay speechless and still; the eyeballs turned somewhat upwards, the upper lids immovably elevated, and the pupils dilated to their fullest extent. At about 6.30 P.M. a convulsive attack came on, and he voided a most profuse quantity of thin, dark, grumous fæces, with a fœtor of the most intolerable character, the sickening odour of which was beyond description. The muscles of the chest, abdomen, and arms were affected by the convulsions, but not those of the back and legs. Though he lay perfectly straight and rigid, there seemed to be no opisthotonos. The convulsive attacks soon began to recur at short intervals, and a slight touch, merely, of the skin sufficed to bring them on. The hands eagerly grasped any article, and on attempting to withdraw it the grasp became stronger and the shaking and convulsion increased, whilst at the same time it is believed that he remained entirely unconscious. The bowels continued to discharge, and nearly a gallon of this grumous matter must have passed. Urine was drawn off with a catheter in immense quantity. The temperature was 103·3°, and later on rose to 104·5°, the pulse being all along about 130, and intermittent every fifth or twelfth beat. During the convulsions he screamed loudly. The convulsive attacks getting more prolonged, and interfering so much with respiration, inhalation of chloroform was resorted to. Under the use of this the convulsions ceased or were controlled, the pupils contracted to nearly their natural size, and the pulse became fairly full, slower and intermittent, but at long intervals. Two ounces of brandy were given and swallowed well; also beef-tea. At 1 A.M. on March 22nd the pulse began again to flutter and intermit. A sinapism was applied to the præcordia and epigastrium, and an enema of beef-tea and brandy administered. He continued to moan, but had no convulsions to speak of. The pupils again became dilated, and most profuse sweat—not cold—bathed the whole body. He became unable to swallow, and sank at 3A.M. A case exactly similar occurred at the same time in the next tent, but the man died about two hours after admission.

LIVERPOOL.

(*From our own Correspondent.*)

THE PREVENTION OF CRUELTY TO CHILDREN.

Two years ago a Society was formed here for the prevention of cruelty to children, and its first annual meeting was held in March, 1884. Similar societies have since been formed in London, Manchester, Edinburgh, and Glasgow, all of which have adopted the rules of our local society. At the second annual meeeting of the latter, held on the 20th inst., it was stated in the report that, during the year, complaints had been dealt with by the Society involving the welfare of 844 children. Speaking generally, the cases were more those of gross neglect than of active and deliberate cruelty. In fourteen cases the parents were prosecuted and punished. The condition of the children in the streets of Liverpool has long been a reproach to the city, and it was hoped that the School Board would be the means of effecting an improvement. The evil was one, however, with which they had no power to deal; hence, the new Society has a noble work to perform, and it is being vigorously taken in hand. No class of men know how much unpunished cruelty to children goes on so well as medical practitioners, especially those who hold parochial appointments. These children by their miserable appearance excite sympathy, and with the money received from charitable persons often maintain their drunken and idle parents. A great effort is being made by the head constable to suppress mendicity, and when it is found to be unprofitable much of the present cruelty to children will cease.

COURTS OF LAW AND FETID ATMOSPHERE.

Mr. Justice Wills has severely censured the authorities in Manchester for the very inadequate arrangements made for the accommodation of prisoners awaiting trial. That which is provided in our local courts is superior to less modern courts, but it must be frankly admitted that the accommodation for witnesses is very deficient. Medical and other witnesses awaiting their turn to go before the grand jury are huddled together at the top of a staircase and along a corridor where the atmosphere is most vitiated. This ordeal passed, the medical witness has to choose between the corridors, the outside of the building, or the body of the court, the general waiting-room being quite out of the question. In the Crown Court itself the atmosphere becomes very vitiated even on a winter's day, and in summer time almost intolerable, except to those who are well acclimatised to it. The radical defect in our assize and police courts is a want of sufficent escape for foul air at the top of the building. It is not many years since the late Mr. Justice Heyes fell a victim to the polluted atmosphere of the court in which he had been presiding, and there can be little doubt that many an illness has arisen from being required to attend court as juror or witness.

THE STIPENDIARY MAGISTRATE AND CASES OF BITING.

At the police-court on Monday last, a respectably-dressed man, who had hitherto borne a good character, was charged with an assault upon a city constable, whose hand he had bitten, besides inflicting sundry bruises. The magistrate, on being asked by the prisoner's solicitor to deal summarily with the case, declined to do so, remarking that it was his determination to send all such cases to trial, "as cannibals deserved more severe punishment than he was able to award them."

CORONERS, MEDICAL WITNESSES, AND POST-MORTEM EXAMINATIONS IN WORKHOUSES.

The result of the Croydon Workhouse case will be watched with considerable interest by practitioners here as elsewhere. In the Liverpool Workhouse there are, on an average, at any given time, 2500 inmates. As may be readily understood, among such a number inquests will occur frequently in the course of the year, and the resident medical officers have invariably been paid for attendance and for making autopsies. To require them to undertake such additional work gratuitously would be manifestly unfair, as well as contrary to the understanding which regulates the acceptance of such appointments.

Liverpool, April 22nd, 1885.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

DURHAM UNIVERSITY.

Certain important alterations were made at the late convention of this University in the regulations respecting the degree of Bachelor of Medicine. Henceforward every medical student will have to pass a preliminary examination in general knowledge, including the English language and history, arithmetic, geography, and Latin; and candidates for the degree of M.B. will have to be of the standing required for admission to the licence in Medicine, and must have fulfilled similar conditions as regards residence and attendance on lectures and hospital practice during four years.

THE PROPOSED FLOATING HOSPITAL FOR THE TYNE.

At a late meeting of the Tyne Commissioners notes were submitted in reference to the new floating hospital. The city engineer proposed to float it upon circular pontoons, placed ten feet apart, and surmounted upon a platform of iron and timber. These pontoons would be so arranged as to carry the platform about four feet above the water level. It was proposed to have three large wards, with ten beds each. The wards would of course be of wood, doubly lined. The roof would be of zinc or wood. Space was provided on the proposed platform for the future erection of the administrative block; but the cost would not be included in the present estimate. The cost of the hospital would be £4000.

THE NEW ETHOXO LIME-LIGHT.

At a late meeting under the auspices of the Northern Counties Photographic Association, held in the theatre of the Newcastle Literary and Philosophical Society, a paper was read upon the new Ethoxo Lime-light by the Rev. F. T. Hardwick, which is claimed to be equal in lighting power to the oxyhydrogen light, and more safe and convenient. A letter was read from Professor Herschell testifying to the safety of the improved ethoxo light under tests of exceptional severity. Mr. Hardwick showed slides of insect life, &c., by aid of this light, and his demonstrations were admitted to have been very interesting and successful.

THE WATER-SUPPLY OF NEWCASTLE.

Some of our local papers are pointing out that the water-supply to our Tyneside towns is beginning to take a rather serious aspect. The population supplied by our waterworks is 770,000, and it is calculated that we have only 900 million gallons in store, against 2000 million gallons at the same period last year. At this rate our store will be exhausted in four months—that is, by the end of July. Of course we have the Tyne to fall back upon, but this source is open to many objections, and at present it is only pumped to meet trade demands. It is to be hoped that "a great many things may happen" before we have to resort to the Tyne for drinking purposes.

PRISONERS DYING IN GAOL.

The death of a prisoner under sentence, perhaps for some comparatively trivial offence, always produces a painful sensation. A case came before the coroner at Durham lately, in which a prisoner convicted of begging under false pretences died in gaol, after the expiration of his sentence. It was shown that on admission he was examined by the prison surgeon, who, finding him in an advanced state of pulmonary consumption, had him removed to the hospital in the gaol. He became gradually worse, and although his sentence had expired and it was intended to remove him to the workhouse, he succumbed to the disease before this step could be carried out. It was shown at the inquest that everything possible had been done for him from the first; still the coroner pointed out that this was another case which showed the necessity of there being some other place than a prison for the reception of dying persons convicted of crime. Another point was alluded to—namely, that the

Durham prison is too far away from the railway station for weakly people, and that there is no prison van for their conveyance. Cases have occurred of prisoners dying soon after admission to the gaol.

Newcastle-on-Tyne, April 21st.

EDINBURGH.

(*From our own Correspondent.*)

MEETING OF EDINBURGH UNIVERSITY GENERAL COUNCIL.

THE statutory half-yearly meeting of the General Council was held on Tuesday, the 21st instant. Lord Inglis, the Chancellor of the University, presided, and was supported by the Principal, Sir William Muir, and several of the professors. The whole interest of the meeting centred in the question of University reform, and there were several motions on the orders of business which had reference to the Universities (Scotland) Bill, 1885. The first was moved by Mr. Taylor Innes, Advocate, approving the general scope and principle of the Bill, and proposing to petition Parliament in favour of its early passage into law. In bringing forward this motion, Mr. Innes said that, in his opinion, there were clauses in the Bill which would require amendment in passing through committee, but that it should be supported, as it provided for many useful reforms, amongst which he might cite the scope of those clauses which endow the Commissioners under the Act with powers of adding to the functions of the General Council and increasing its power, of further developing the range of extra-mural teaching, and of providing for the University education of women. Amidst loud expressions of varied opinion on this point, Mr. Innes expressed the hope that the University curricula would soon be thrown open to the other half of the human race. He also drew attention to the fact, that in the present Bill the finality clause as regards the limitation of Government support to Scottish Universities has been abandoned, and this he urged as an additional reason for supporting the Bill as at present drafted. Mr. McKie proposed an amendment, approving the clauses which increase the powers of the University Court and the General Council, but opposing the Bill as a whole unless greatly modified. The amendment was rejected, and the motion carried by a large majority. Professor Laurie brought forward a motion urging upon the Government the reconsideration of the clauses which transfer the Observatory and Botanic Gardens to the University, providing for the payment of pensions by the Senatus instead of by the treasury, and transferring the patronage of bursaries from various private individuals and corporate bodies to the Senatus. After prolonged discussion this motion, with a slight modification, was agreed to. Professor Masson then opened a discussion of some importance upon the question of an increased teaching staff within the University itself. At the meeting of Council held last October a general motion in favour of increased facilities for extra-academical teaching had been adopted; and the present motion, while conceding the importance of that element, urges that attention should also be paid to a scheme for greatly enhancing the teaching power of the University within its own economy by adding to the numbers of its teaching staff. This, Professor Masson thinks, should be carried out on the German *privat docent* system; and he advocates an advance in the status of assistants to professors, and of their emoluments, as the best means of accomplishing this object. Mr. Scott Dalgleish proposed an amendment reaffirming the position taken by the Council in the matter last October. An animated discussion ensued, followed by a division, when the amendment was declared to be carried by 26 votes to 22. Several members present abstained from voting. This result was largely due to the vote of the medical graduates present, many of whom are themselves engaged in extra-mural teaching in the Edinburgh Medical School, and who view with distrust any proposals tending to diminish the importance which the extra-academical school at present possesses in relation to medical teaching in Edinburgh.

SUPERANNUATION.—Mr. Arthur Priest, late medical officer for the Waltham Abbey district, Edmonton Union, has received a superannuation allowance of £71 8s. a year.

IRELAND.

(*From our own Correspondent.*)

ROYAL UNIVERSITY OF IRELAND.

As the undergraduates of the University of Dublin have been granted a term, a memorial is about to be presented to H.R.H. the Princess of Wales, praying that she may be pleased to ask the Senate of the Royal University to grant a similar favour to the undergraduates of this University. Honour students will not feel this concession, if granted, in any way a hardship, as they will, as usual, have the right to compete for exhibitions. Steps are being taken to place the matter under the Royal notice before the return to England.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

At the last meeting of Council the President read a letter from Dr. Cameron, the Vice-President, stating that, having suggested the idea of erecting a marble statue to Mr. William Dease in the College, Mr. M. O'Reilly-Dease, D.L., a grandson of the celebrated surgeon, had offered to defray the entire cost of erecting the monument, and had given him (Dr. Cameron) *carte blanche* to make all the arrangements. We understand Dr. Cameron has selected Mr. Thomas Farrell, the eminent sculptor, to carry out the work, which will at once be commenced. On the motion of Mr. Colles, seconded by Sir G. H. Porter, Mr. O'Reilly-Dease's generous offer was thankfully accepted.

ALTERATION OF IRISH PRISONS RULES.

By an Order in Council the Lord-Lieutenant has approved of certain rules made by the General Prisons Board for Ireland in relation to the duties of surgeons to prisons. These are as follows:—1. That no irons or means of mechanical restraint shall be used, excepting such as are approved by the Lord-Lieutenant, or such as may be considered necessary by the medical officer to be used as medical appliances in the case of violent prisoners in hospitals. 2. The surgeon shall visit the prison once each day, and not later than 12 o'clock noon, and oftener if necessary; and shall see every prisoner in the course of the week. He shall daily visit the prisoners, if any, confined in punishment cells or under punishment in their own cells, or under mechanical restraint; and he shall visit daily, and oftener if necessary, such of the prisoners as are sick, and when necessary shall direct any prisoner to be removed to the infirmary. 3. The surgeon shall, whenever he considers a prisoner's life to be in danger by further confinement, at once report the fact to the Under Secretary for the Lord-Lieutenant's information, and also to the General Prisons Board and to the governor; and he is also to report to the governor the case of any prisoner to which he may think it necessary, on medical grounds, to draw attention.

THE TREATMENT OF INTERNAL ANEURYSM.

In a paper read by Professor Finny at the last meeting of the Pathological Section of the Academy of Medicine in Ireland, the treatment advocated by Mr. Tufnell of Dublin was highly recommended. Mr. Tufnell, who was present, made a very interesting communication in reference to his treatment in cases of internal aneurysm, and particularly insisted on rest in the horizontal position for a considerable time as a most important element in these cases. He referred to two cases of well-marked abdominal aneurysm, the subjects of which were now in excellent health, one after five years, and the second after seven years, since his mode of treatment had been used.

Dublin, April 21st.

PARIS.

(*From our Paris Correspondent.*)

THE NATURE OF THE CURVED OR COMMA BACILLI.

AT the meeting of the Académie des Sciences last week Professor Richet read a paper, in the name of M. J. Héricourt, on the nature of the curved or comma bacilli and on the presence of their germs in the air. The following are the conclusions of the author:—1. In all waters, whatever be their quality or origin (springs, drains, wells, cisterns, &c.), there exist curved bacilli of variable forms and dimensions, among which those of the type that are described as choleriform are constantly found. 2. The curved bacilli do not exist in the atmosphere under their characteristic form; they are there found in a state of germs, under the form of spores. 3. The intestinal dejections in simple diarrhœa, as well as in dysentery and typhoid fever; the broncho-pulmonary secretions in the various diseases of the lungs, in pus exposed to the air, human saliva, whether normal or abnormal—all substances, in fine, that are susceptible of serving as nutriment to germs or bacteria, contain curved bacilli. 4. These curved bacilli are strongly aërobied, and it is only at the surface of liquids that they are to be collected. They are very mobile. They are agitated by rapid oscillations, exactly similar to those of vibriones, and are endowed with a strong power of refraction. They are about half or two-thirds of the length of the bacilli found in tuberculosis, and are thicker and less regular than the latter. Nothing differentiates them from the bacilli that are found in the dejections of cholera patients. 5. In awaiting inoculations more conclusive of their pathogenic *rôle* being performed with the comma bacilli collected in the intestines of cholera patients, the conclusion to be drawn from the propositions that precede is that these micro-organisms are the same as those that are found in all secretions, whether normal or pathological, on the only condition that these secretions have been found in contact with water in which the curved bacilli are the habitual occupants, or with the air which conveys their germs.

THE REMOVAL OF A CANCEROUS KIDNEY.

Wishing to know the cause of the omission on the part of Dr. Péan to state whether the operation of gastrotomy, referred to in my letter of the 11th inst., was performed under the influence of chloroform or other anæsthetic, or whether antiseptics were employed or not, I wrote to him on the subject, and received for answer, "Inutile de vous dire que je soumets à l'anesthésie chloroformique toutes les malades auxquelles je pratique la gastrotomie, et que je me contente, à la suite de l'opération, de l'appareil ouaté compressif et du pansement par occlusion de Chassaignac comme je l'ai fait depuis 25 ans, sans autre précaution antiseptic. J'ai rejeté depuis longtemps le 'spray' comme étant plus dangereux qu'utile dans ces sortes d'opérations." I may here add that the patient who was the subject of Dr. Péan's communication was herself presented to the Academy of Medicine. She was thirty-six years of age. She also formed the subject of a clinical lecture by Dr. Péan, which will be found embodied in vol. iv. of his "Cliniques de l'Hôpital Saint Louis," about to appear. The lesson taught by this case is, according to the author, that in the presence of large malignant tumours of the kidneys, the course of which is not hyper-acute, one should not despair of cure. I may here also add that in the case under notice it was the right kidney that was removed.

MM. CHARLES ROBIN AND CORNIL.

By a special decree in their favour MM. Charles Robin and Cornil, Senators, have been allowed to retain their respective positions at the Faculty of Medicine of Paris, the former as Professor of Histology, and the latter as Professor of Morbid Anatomy.

Paris, April 21st.

THE SERVICES.

War Office.—Army Medical Staff: The undermentioned officers are granted retired pay, with the honorary rank of Deputy Surgeon-General:—Brigade Surgeon William Gerard Don, M.D., Brigade Surgeon Samuel Stacy Skipton, M.D. The undermentioned officers are granted retired pay with the honorary rank of Brigade Surgeon:—Surgeon-Majors James Edward Clark, William George Ross, M.D.; John Anderson, C.I.E.; George Francis Dooley, Eugene Robert O'Brien, M.D.; and John Norman Davis, M.D.

Indian Medical Department.—Deputy Surgeon-General Michael Cudmore Furnell, M.D., F.R.C.S., Sanitary Commissioner, Madras, has been appointed Surgeon-General with the Government of Madras; Deputy Surgeon-General George Bidie, M.B., C.I.E., has been appointed Sanitary Commissioner, Madras; Surgeon Hazlett Allison, M.D., has been appointed Assistant Physician, Madras General Hospital; Brigade Surgeon J. McN. Donnelly, M.D., has been promoted to be a Deputy Surgeon-General, with permanent rank.

Admiralty.—The following appointments have been made:—Surgeon Francis H. Julyan, to the *Triton*, additional; Fleet Surgeon James Trimble, to the *Asia;* Staff Surgeon James Robertson, to the *Conquest;* Fleet Surgeon Robert Nelson, to the *Thunderer;* Staff Surgeon Michael Fitzgerald, to the *Orion;* Surgeon Edward G. Swan, to the *Thunderer;* Surgeon Denis W. Donovan, to the *Alexandra*, additional. Staff Surgeon William Henry Stewart, M.B., has been promoted to the rank of Fleet Surgeon in Her Majesty's Fleet.

Yeomanry Cavalry.—Middlesex: Surgeon Thos. William Thompson resigns his commission.

MEDICAL NOTES IN PARLIAMENT.

The Poisons Bill.

In the House of Lords on the 20th inst., Lord Carlingford having moved that the Poisons Bill be referred to a Select Committee, the Earl of Milltown, who had given notice that on the motion for going into Committee on the Bill he would move, "That the House resolve itself into Committee on the Bill this day six months," said he felt very strongly that a measure on this subject was necessary, right, and proper. At the same time, however, he was of opinion that the Bill now before their lordships was not a good one, and that it was extremely likely to harass and hamper legitimate trade. It had been brought forward without any reference to the interests of the trade or to the interests of the public, and on that ground he appealed to the noble lord some time ago to refer it to a Select Committee. The noble lord had now done so, and he would, therefore, withdraw his notice on the paper. The motion was carried.

The Expenditure of the Eastern Hospitals.

In the House of Commons on the 20th inst., Mr. G. Russell, in reply to Baron H. De Worms, stated that the Local Government Board had been asked by the Metropolitan Asylums Board and several Boards of Guardians to institute an inquiry into the expenditure of the Eastern Hospitals, and the inquiry has been intrusted to three of the Board's inspectors, Mr. Hedley, Dr. Bridges, and Mr. George Taylor.

Pauper Lunatics.

On the 21st inst., Mr. G. Russell, in reply to Mr. J. Talbot, said the question of detaining pauper lunatics in workhouses, in view of the recent decisions of magistrates on the subject, was being considered in connexion with the Lunacy Bill which had been introduced into the House of Lords by the Lord Chancellor.

The Health of the Troops in the Soudan.

The Marquis of Hartington, in reply to Sir F. Milner, said that from the circumstances under which our forces were now placed in the Soudan, it was scarcely possible to state the exact percentage of sickness. On the whole, however, the health of the troops was reported to be good. They had not received any accounts showing that an extraordinary amount of suffering prevailed among the troops on the Nile. All the arrangements for the accommodation of the troops were made locally. Large supplies of clothing and other requisites had been sent out, but it would be impossible to state how far the means of transport at the disposal of the authorities in Egypt enabled them fully to reap the advantage of such arrangements.

Private Lunatic Asylums (Ireland) Bill.

On the 22nd inst. Mr. Corbet moved the second reading of this Bill, the object of which, he said, was gradually to get rid of private asylums kept for pecuniary profit, which was reported to be at the root of all the evils connected with private asylums in Ireland. Mr. Campbell-Bannerman said that the Government had introduced into the other House a Bill dealing with the subject of lunacy on different lines from this Bill, and it would be impossible to be legislating at the same time upon one system in the other House and upon another system in this House. He knew and admitted all that could be said in favour of doing away with private asylums; at the same time to get rid of them in a summary way would raise large questions of compensation. The hon. member assumed that asylums would be self-supporting if they were erected, but money would be required to erect them. The hon. member said he would get it from the

Church Fund Surplus; but to the best of his belief there was nothing to be obtained from that source. The Bill was lost by a majority of thirty-five.

Mr. Acland moved the second reading of the Public Health (Members and Officers) Bill, which after some discussion was read a second time.

Obituary.

OSWALD GEORGE DYX BRADSHAW, M.R.C.S., L.R.C.P.

THE death of Surgeon Bradshaw at Korti, March 13th, 1885, from enteric fever, has created a feeling of the deepest regret. He was beloved and respected by all with whom he had occasion to become associated, and, though but a young man, his professional and social merits had secured for him a large circle of friends. He was the youngest son of the late Capt. L. A. Bradshaw, Royal Artillery, and was born in 1859, at Secunderabad. He was educated at Wellington College, and entered the British Medical School in 1876; subsequently becoming a student at St. George's Hospital in 1878. At the latter institution he obtained the Brackenbury prize in medicine, and passed first in the Army Medical Service at the August examination, 1883. At Netley his career was marked by the same devotion to work, and he was rewarded by gaining the Martin Memorial Gold Medal for proficiency in Military Hygiene, and the Director-General's Prize for Pathology. In September, 1884, he obtained his commission, and sailed for Egypt, where he was actively employed at the front, and was untiring in his care of the sick. The fever was probably contracted by the bad water and fatigue incident to a long march across the desert. In him the service has lost a brave and faithful officer, the profession a useful member, and his friends a genial and pleasant companion.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following candidates passed the Primary Examination in Anatomy and Physiology for the diploma of Member of the College at a meeting of the Board of Examiners on the 8th inst.:—

ANATOMY AND PHYSIOLOGY.—Joseph Beadle, Newcastle and Glasgow; G. Hamerton Rowlands, O. Taunton Stephenson and Charles W. Graham, Liverpool School of Medicine; J. Price Williams, Percy Ashworth, Herbert Wade, and Arthur M. Cass, Manchester; George A. Ferraby, W. Matthew Joyce, and Leslie Whitehead, Birmingham; T. Mayo Stiles, G. Henry Skinner, F. Horace Hudson, and Frank Calden, Bristol; Percy R. Gostling, T. H. Fencott Evans, A. Knight Holt, and Edwin C. Palmer, St. Bartholomew's; Herbert J. Roper, J. Arthur Smith, and Henry Goot, Leeds; Patrick Hehir, Edinburgh and Calcutta; P. J. Mader, Edinburgh; M. Mitchell Bird, St. Mary's; William Branson, Sheffield; George Cherry, Toronto.

ANATOMY ONLY.—Lewis L. Bailes, Newcastle; A. Dunley Owen, Bristol; W. Matthews Joyce and J. Hazlewood Clayton, Birmingham; A. Morton Barford, St. Bartholomew's.

(Candidates referred for three months, 5; six months, 4.)

Passed on the 10th inst.:—

ANATOMY AND PHYSIOLOGY.—W. Bickward Bacot, R. William Boyce, University College; Christopher P. Spink, W. Barker Russell, and H. Clifford Baldwin, Leeds; M. Prentice Ledward and J. Harwood Wilson, Manchester; A. Edward Leitch, J. Hepworth Shaw, G. William Chaster, W. Edward Livesey, and J. Webster Shannon, Liverpool; E. Lyall Haynes, L. William Andrews, L. Emilius Jowers; Thomas Lissaman, T. William Kelly, and B. A. Farrar, St. Bartholomew's; J. W. B. Pegram, E. Alfred Sadler, G. T. Congreve Barker, and H. Wynne Thomas, Birmingham; J. Smith Bootman, Newcastle; John Stokes, Sheffield; G. Herbert Pennell, Guy's; W. M. F. Nelson, Montreal; H. Stanfield Collier, St. Mary's; Benjamin Walker, London.

ANATOMY ONLY.—R. Hamilton, Bristol; A. E. D. R. Peters, St. Bartholomew's; J. A. Eyton-Jones, Liverpool; J. E. Foster, Birmingham.

PHYSIOLOGY ONLY.—R. B. Smith and J. W. Whitehead, Manchester.

(Candidates referred for three months, 6; six months, 2.)

Passed on the 11th inst.:—

ANATOMY AND PHYSIOLOGY.—W. Arthur Hooton, Richard Alcock, J. Watson Lonsdale, and J. F. Woolhatt, Manchester; F. H. Whitehead, C. [illegible] and Manchester; J. Houghton White, Ernest [illegible], Henry Hawley, and W. Edward Hardy, St. Bartholomew's; [illegible], London; Percival E. Burnett, Middlesex; Charles [illegible], T. William [illegible], University College; Basil W. Hossman, [illegible], G. E. Keane, University College; and Ernest H. Snell, Birmingham; [illegible], Samuel Nicklin, and J. V. W. Rutherford, Edinburgh; Joseph [illegible] Keane, Liverpool; J. Wheeler and W. Job Maillard, Guy's; Frederick Lace, Bristol, Arthur Miers, Leeds.

ANATOMY ONLY.—George Thorpe, Sheffield; Arthur W. Hogg, St. Bartholomew's; Abraham J. Meuer, New York; Percy J. Spencer, London; Hubert Joslen, Guy's.

PHYSIOLOGY ONLY.—Herbert Burland, Manchester; F. S. Jermaine-Ludham, St. Bartholomew's; H. Cecil Nicholls, Charing-cross; Evan Jones, London.

(Candidates referred for three months, 2; six months, 2.)

Passed on the 13th inst.:—

ANATOMY AND PHYSIOLOGY.—R. Oxley Bowman, Jabez D. Windle, Daniel Booth, W. Leonard Bentley, E. Ernest Smith, and Arthur E. Giles, Manchester; G. Arbuthnot Robinson, London; Robert Bird, C. Stanstay Edwards, J. G. Ernest Colby, W. Norman Evans, John Rust, and T. William Francis, St. Bartholomew's; Henry J. Campbell and Morgan J. Morgan, Guy's; Frederick W. Stokes, Birmingham; Eric E. Kershaw, and M. Percy Cooke, Middlesex; Francis Naumann and Albert W. Cooke, Charing-cross; Richard P. Brooks, King's College; Stanwell Weldon and John Wayte, St. George's; W. Ap Samuel J. Graham, St. Mary's; T. Arnold Durrant, St. Thomas's.

ANATOMY ONLY.—William Rennie and J. Hurd Gordon, Birmingham; William Mortimer, London.

PHYSIOLOGY ONLY.—F. Cubbon Rogers, Manchester; C. L. S. James, London; A. F. Bilderbeck-Gomes, St. George's; Percy V. Dodd, St. Bartholomew's.

(Candidates referred for three months, 6; six months, 4.)

Passed on the 14th inst.:—

ANATOMY AND PHYSIOLOGY.—H. C. Leffler Arnim and Robert May, Charing-cross; Prideaux G. Selby, E. T. Mosse Tunnicliffe, A. Lindsay Travers, John W. Applegate, and A. Leonard Bright, St. Bartholomew's; H. C. Bristowe, R. Jackson Langley, R. Vaughan Solly, and E. Charles Mahany, St. Thomas's; H. E. Drake-Brockman, R. Staker Turton, and Beaumont H. Comerford, St. George's; James Wigg and J. H. E. Jarvis, London; Charles H. Buckley, James P. Walker, and George A. Berry, Manchester; Herbert E. Cuff, Guy B. Smith, and John D. Cruickshank, Guy's; C. Herman Fernan, University College; Howard P. Ward, King's College; W. Baron Cockill, Middlesex.

ANATOMY ONLY.—T. Owen Raw and Astley C. Roberts, Guy's; T. Alexander Murray, Manchester; M. Bayfield Dumaresq, London; Ernest Dawson, Westminster; James Daniel Brown and Cyril W. Shaw, St. George's; Alfred Bowles, University College.

PHYSIOLOGY ONLY.—P. Seymour Harris, Middlesex; W. Douglas Gimson, St. Bartholomew's; Lionel N. Hoysted, Charing-cross; Frank Elias, University College; G. W. B. Daniel, St. George's; George A. Slack, Guy's; Arthur Crook, London.

(Candidates referred for three months, 6; six months, 2.)

Passed on the 15th inst.:—

ANATOMY AND PHYSIOLOGY.—J. Auriol Armitage and T. Hamilton Ward, Edinburgh; J. George Carter, Charing-cross; Walter J. Bearblock, Walter Fisher, Joseph C. Baines, Ernest H. Starling, J. Vincent Blachford, and J. Low Aymard, Guy's; J. Llewellyn Rees, G. Gordon Parsons, and W. Burwell Darroll, London; E. Courtney Lomas, Marmaduke Bannister, Harvey Rhodes, and A. Baxendell, Manchester; E. A. Griffiths Dowling, Frank E. Gibbens, and George Heaton, St. Bartholomew's; H. Bryan Densham, Bristol and Edinburgh; W. Henry Vickery, R. Francis Thomas, and C. Lloyd Worrell, Middlesex; G. A. T. Bray and R. James Carter, King's College; E. Deanesley, University College; J. T. Bays, St. Mary's.

ANATOMY ONLY.—Walter S. Holford, St. George's; Harold Birkenhead, Manchester; T. Edward Pallett, Westminster; W. Wheldon Williams, University College; Jasper J. Garmany, Bellevue; James E. Brown, Toronto.

PHYSIOLOGY ONLY.—W. John Midelton and H. Y. Whitchurch, St. Bartholomew's; J. Wilkins, London; Malcolm E. H. Wale, St. George's; J. Douglas Cree, Middlesex; H. Foreman Cartmill, Manchester; Norman Davis, Newcastle; William Jones, University College.

(Candidates referred for three months, 4; six months, 1.)

At the recent Primary or Anatomical and Physiological examinations for the diploma of Membership of the Royal College of Surgeons, 387 candidates presented themselves. Of these 148 were referred.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following candidates passed the Second Examination (Anatomy and Physiology) on the 11th inst.:—

O. Le Mare Theobald, Walter Lovett Hubbard, H. H. Brodie MacLeod and Ernest A. W. Armstrong, King's College; Arthur W. James and W. P. Peake, St. Bartholomew's.

Passed on the 13th inst.:—

Herbert A. Smith and Edgar R. White, King's College; William Woodward, St. Bartholomew's.

UNIVERSITY OF ABERDEEN.—At the late medical graduation term, the following candidates, after the usual examination, received degrees in Medicine and Surgery:—

DEGREE OF M.D.

Brown, Clarence W. Haig, M.B., C.M., Godalming, Surrey.
Campbell, Alexander, M.B., C.M., Dundee.
Collie, Robert John, M.B., C.M., Aberdeen.
Cooper, William, M.B., C.M., Belhelvie.
Crow, Herbert William Tolver, M.B., C.M., London.
Gayton, Francis Carteret, M.B., C.M., Surrey County Asylum, Woking.
Home, Andrew, M.B., C.M., Inverness District Asylum.
MacLean, Alexander, M.B., C.M., Deputy Surgeon General, Thurso, Caithness.

Stewart, William H., M.B., C.M., H.M.S. *Clyde*, Aberdeen.
Stuart, William, M.B., C.M., Stratton, Cornwall.

Degrees of M.B. and C.M.

†Alcock, Alfred William, Bombay.
Anderson, John, M.A., Marnoch.
Brown, David MacDonald, Banchory-Ternan.
Butchart, Charles Alexander, Aberdeen.
Connan, Alexander Gray, Aberdeen.
Cowan, Andrew Hunter, Aberdeen.
†Davidson, John Stuart, Mauritius.
Deane, E. Greaves Wooding, Barbadoes, West Indies.
Duncan, John, M.A., Aberdeen.
†Godfrey, Henry William, Hornhurch, Essex.
Gunn, James William McKenzie, M.A., Reay, Thurso.
Henderson, Albert Edward, Sheffield.
Irvine, John Charles Davidson, Udny.
†Jones, Francis Grice, Denbigh, North Wales.
*Lamb, John Marshall, M.A., Aberdeen.
Marsden, John, Banff.
*Milne, Alexander, Huntly.
†Milne, James Black, Huntly.
Morgan, William Vincent, Narberth, Pembrokeshire.
†Paterson, Thomas George, New Galloway.
*Rattray, Patrick Whyte, M.A., Aberdeen.
Scott, George, Aberdeen.
Simpson, David, M.A., Alvah, Banff.
Simpson, William Bulmer, Bedale, Yorkshire.
*Smith, Arthur Greatorex, Marlborough.
Sullivan, Peter Alfred, Carlisle.

* Highest Academical Honours. † Honourable Distinction.

The John Murray Medal and Scholarship was awarded to

Patrick Whyte Rattray, M.A.

The following were certified as having passed all the examinations, but did not graduate:—

Charles Mitchell Aird, Leslie Durno, James Murray, Cecil Robertson, and John Hutton Stenhouse.

The next Professional Examination for degrees in Medicine commences on July 18th.

College of Physicians in Ireland.—At the April examinations the following obtained the licences in Medicine and Midwifery of the College:—

Medicine.—Robert Blackwell, Thomas J. Dillon, William Dillon, Andrew A. Doyle, Richard Herbert Joseph Fetherston, James Heffernan, Samuel Horneck, John Lowney, David Charles Morgan Lunt, John McFadden, Joseph Daniel McFeely, Edmond Ryan MacMahon, Septimus Palmer, Paul A. Piel, Joseph Robinson, Herbert Shackleton, Henry Barlow Strong, Hamilton James Thornbury, Richard Henry Tailour, Everard Woods.

Midwifery.—Robert Blackwell, William Dillon, Richard Herbert Joseph Fetherston, David Morgan Lunt, John McFadden, Joseph Daniel McFeely, Paul A. Piel, Joseph Robinson, Hamilton James Thornbury, Everard Woods.

The undermentioned were admitted Fellows:—

A. H. Horne. | F. X. MacCabe.
James Pollock.

Apothecaries' Hall.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 9th inst.:—

Cockerill, John W., St. Bartholomew's Hospital.

Passed on the 16th inst.:—

Carless, Albert, King's College.
Crowdy, F. Demainbray, St. Thomas's Hospital.
Rattray, Alexander, Edinburgh University.
Warner, Frederick Ashton, St. George's Hospital.

We are asked to state that the Press Information Agency is now a Limited Liability Company.

Mr. Joseph Crossland, local banker and manufacturer, has given £1000 to the Huddersfield Infirmary for the establishment of a children's ward.

Thompson Memorial Home, Lisburn.—This institution has just received the very handsome donation of £10,000 from a relative of the late Dr. Thompson.

On the 18th inst., the Kent justices decided to build an infectious diseases hospital at the County Lunatic Asylum at Chartham, near Canterbury. The cost will be £2500, or about £125 per bed.

The Corporation of Cork have passed a vote of thanks to Dr. Donovan for his exertions, in conjunction with his staff of assistants, in grappling with, and stamping out, the epidemic of small-pox in that city.

Epsom College.—The Rev. Dr. West will retire at the end of Easter Term from the Head Mastership of the Medical College at Epsom, which he has held for fifteen years; and the Council have appointed the Rev. W. Cecil Wood, M.A., as his successor. Mr. Wood, who is now Head Master of Birkenhead School, has had much experience in important public schools, and especially at Wellington College, where he was a master for eight years.

Association of Members of the Royal College of Surgeons.—The annual general meeting of this Association will be held on Tuesday, May 5th, at 4 p.m., in the Westminster Town Hall, Dr. Danford Thomas in the chair. All members of the College are invited to attend.

American Precautions against Cholera.—The *Liveprool Journal of Commerce* says that the United States Government is taking early precautions against the introduction of cholera into their country. Orders have been issued by the American Consul at Liverpool that he must have twenty-four hours' notice of the sailing of any vessel to the United States, in order that it may be subject to sanitary inspection by officers specially appointed for that purpose.

Paddington-green Children's Hospital.—The report, which was read at the second annual meeting of the contributors to this hospital on the 16th inst., stated that 288 in-patients had been admitted during the year; 9356 new out-patients were treated, the total attendances being 29,328, or an increase of 10,669 over those of 1883; 398 casualty cases also received attention. The yearly expenditure is about £1700, towards which there is a subscription list of £679. During 1884 a sum total of £258 was subscribed by the working-men of the district.

City of London Truss Society.—The seventy-eighth annual festival in aid of this Society was held on the 21st inst., the Lord Mayor presiding. Since the charity was established in 1807, more than 406,000 patients of all ages and both sexes have been relieved, the number in the first year being 227, and last year 9248. In 1884 the regular annual subscriptions amounted to £1843, new and additional subscriptions to £144, life subscriptions and donations to £902, legacies to £1868, and extra by governors for letters £103. During the evening subscriptions amounting to £520 were announced.

Victoria University.—At a meeting of the Court of this University last week, Professor Rendall moved the following resolution, which was approved:—"That any registered medical practitioner who shall have qualified to practise medicine or surgery prior to January 1st, 1885, shall be permitted to enter for the intermediate and final examinations for the degree of Bachelor of Medicine without having previously passed the entrance examination in arts or the preliminary examination in science, provided that all other requirements for admission to the intermediate and final examination have been duly complied with."

Sanitation at Bedford.—An action was recently brought against the Mayor and Corporation of Bedford for cutting off the connexion between the drains of the plaintiff's houses and the main sewer. The Corporation, in defence, alleged that the plaintiff covered in his drains without notice to their surveyor to afford him an opportunity of inspecting them; that "it is most important in the interests of the public, and is, in fact, absolutely essential for sanitary purposes, that the corporation surveyor should have an opportunity of inspecting the drains of houses and their connexions with the main sewer before they are covered in;" and that the plaintiff was duly required in writing to uncover them for inspection, which he refused to do. Evidence having been given as to the faulty construction of the drains, judgment was given for the defendants.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Bramwell, Hugh Ransom, M.B. & C.M.Ed., has been appointed Resident Physician to the Royal Infirmary, Edinburgh.

Clark, William Thomas Marston, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer of Health to the Twickenham Urban Sanitary District; Surgeon to the Loyal Orleans Lodge of Oddfellows (Manchester Unity); Surgeon to the Waldegrave Lodge of Oddfellows (Manchester Unity); Surgeon to the Boys' Home, Twickenham; Surgeon to the Twickenham Provident Dispensary; and Surgeon to the Twickenham Lying-in Charity.

Crossfield, Arthur Kyffin, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Thirteenth District of the Totnes Union, vice Stone.

Cunningham, Peter Hannah, M.B., C.M.Glas., has been appointed Government Medical Officer for the Shire of Majorca, Victoria.

Griffiths, William Charles, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Conwil Elvet District of the Carmarthen Union, vice Lloyd, resigned.

GUINNESS, THOMAS ARCHIBALD, L.K.Q.C.P.I., M.R.C.S., has been appointed Medical Officer for the Bampton District of the Tiverton Union, vice Nason, resigned.

IRVING, JOHN CHRISTOPHER, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Billinghay District of the Sleaford Union, vice Thompson, resigned.

LLOYD, MORGAN, L.R.C.P.L., M.R.C.S., has been appointed Medical Officer for the Llangendeirne Upper District of the Carmarthen Union, vice Timmins, resigned.

MCHUGH, MICHAEL, M.B.Dub., L.R.C.S.I., has been elected Assistant-Physician to St. Vincent's Hospital, Dublin.

MCKEE, JAMES CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Health Officer for the Borough of Raywood, Victoria.

PARRY-JONES, M., M.B., B.S.Lond., M.R.C.S., has been appointed Resident Medical Officer at the City of London Hospital for Diseases of the Chest, Victoria-park, E.

PESKETT, ALFRED F., M.R.C.S., L.S.A.Lond., has been appointed Resident Accoucheur at the London Hospital.

PIKE, JOSEPH BAIN, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Loughborough District and Workhouse, Loughborough Union, vice Palmer, resigned.

SOUTTER, JOHN CLEMENT, M.D., C.M.Aber., has been appointed Government Medical Officer and Vaccinator at Murrumburrah, New South Wales.

STEPHENS, CHARLES, L.R.C.S.Ed., L.S.A.Lond., has been appointed Medical Officer for the Fourth District of the Stow Union, vice Ebden, deceased.

STOKES, ALFRED WALKER, F.C.S., has been appointed Public Analyst for St. Luke's Parish, vice Pavy, resigned.

Births, Marriages, and Deaths.

BIRTHS.

CHETWOOD.—On the 16th inst., at King-street, Finsbury-square, the wife of William Chetwood, M.R.C.S., of a son.

GIBSON.—On the 21st inst., at Stanley House, Blackstock-road, Finsbury-park, N., the wife of Dr. J. C. Gibson, of a son.

SMITH.—On the 19th inst., at Christ's Hospital, London, the wife of Alder Smith, M.B., F.R.C.S., of a daughter.

WEATHERHEAD.—On the 30th ult., at Fairview Ranch, Boorne, Texas, the wife of J. F. Weatherhead, M.R.C.S., of a daughter.

MARRIAGES.

BURCHELL—EVANS.—On the 9th inst., at the Parish Church, Aldeburgh-on-Sea, Suffolk, Peter Lodwick Burchell, M.B.Lond., F.R.C.S.Eng., to Emily Anne Frances, widow of T. H. Evans, Esq., second daughter of the late William Webber, F.R.C.S.Eng., and granddaughter of the late Sir Thomas Preston, Bart., of Beeston Hall, Norfolk.

HUNT—BAWTREE.—On the 16th inst., at St. Mary-at-the-Walls, Colchester, by the Rev. Canon Luard, Vicar of Stanstead, Essex (uncle of the bride), assisted by the Rev. J. W. Irvine, Rector and Rural Dean, and the Rev. J. G. Bullock, Rector of St. Nicholas and St. Runwald, Edgar Atlee Hunt, M.R.C.S., L.R.C.P., L.S.A.Lond., of Colchester, eldest son of Josiah Hunt, Esq., of Queen Anne's Gate, Westminster, and Putney, S.W., to Charlotte Mary, third daughter of John Bawtree, Esq., of Colchester.

PENFOLD—BAYNE.—On the 3rd February, at All Saints Church, Sandhurst, Victoria, by the Rev. J. Garlick and the Ven. Archdeacon MacCullagh, Oliver Penfold, M.R.C.S. & L.S.A.Lond., to Mary Louisa, second daughter of Alexander Bayne, Esq., of Montanvert, Sandhurst.

SEQUEIRA—STAFFORD.—On the 9th inst., at the Parish Church, Chiswick, Henry J. Sequeira, M.R.C.S., L.S.A.Lond., eldest son of Henry L. Sequeira, M.R.C.S., of Waltham Lodge, Tulse-hill, and the City, to Inez W. E. Stafford (Nina), only daughter of William J. Stafford, Esq., of Bradmore House, Chiswick, W.

SHORE — SARGENT. — On the 28th inst., at St. Peter's, Regent-square, W.C., by the Rev. R. H. A. Bradley, Vicar, Thomas William Shore, M.B., B.Sc.Lond., M.R.C.S., &c., eldest son of T. W. Shore, Esq., of Southampton, to Mary Elizabeth, eldest daughter of H. E. Sargent, Esq., M.D., M.R.C.S., &c., of Shadwell. No cards.

WARD—LYNCH.—On the 16th inst., at St. Gregory's, Sudbury, Suffolk, by the Rev. T. Lingard Green, Rector of the Parish, assisted by the Rev. H. C. Jollye, of Westmount, Dover (brother-in-law of the bride), Allan Ogier Ward, M.B. & C.M., of Casita, Northumberland-park, Tottenham, to Lelia Catherine, daughter of J. C. Lynch, Esq., M.R.C.S., of Sudbury, Suffolk. No cards.

DEATHS.

HARRISON.—On the 17th inst., at Gipsy-hill, Upper Norwood, S.E., Joseph Harrison, M.D., eldest son of the late Thomas Harrison, of Lotamore, Glanmire, co. Cork, aged 70.

LEEMING.—On the 16th inst., at the Victoria Hotel, Southport, Robert Toulmin Leeming, F.R.C.S.Ed., M.R.C.S., & L.S.A.Lond. (of Kendal), aged 55.

PUDDICOMBE.—On the 17th inst., at Dartmouth, Devon, John Morgan Puddicombe, F.R.C.S., aged 70.

SMITH.—On the 12th inst., at Greenhill, Weymouth, William Johnson Smith, M.D., aged 72.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, April 23rd, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 17	30·03	N.E.	46	44	89	64	41	·35	Cloudy
" 18	30·15	N.E.	47	45	99	67	40	...	Hazy
" 19	30·31	N.E.	57	52	107	71	44	...	Bright
" 20	30·33	W.	56	50	110	75	46	...	Hazy
" 21	30·15	W.	59	50	112	74	47	...	Bright
" 22	29·88	S.W.	60	54	109	70	54	...	Cloudy
" 23	29·77	W.	53	50	...	...	49	·02	Cloudy

Medical Diary for the ensuing Week.

Monday, April 27.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Althaus: A case of Syphilis of the Brain.—Dr. West: On Hæmaturia in Granular Kidney.—Dr. Herbert Snow: On the Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri.

Tuesday, April 28.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Mr. A. L. Lewis: On the Past and Present Condition of Certain Rude Stone Monuments in Westmoreland.—Rear-Admiral F. S. Tremlett: Quadrilateral Constructions near Carnac.—Mons. Jean L'Heureux: The Kekip-Sesoators or Ancient Sacrificial Stone of the North-West Tribes of Canada.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Doran: Notes on so-called Non-ovarian Dermoid Tumours.—Dr. Hale White: On the Pathological Histology of the Semilunar and Superior Cervical Sympathetic Ganglia. Dr. Hale White will exhibit a series of Microscopic Specimens in illustration of his paper at 8 P.M.

Wednesday, April 29.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, April 30.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 3 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

Friday, May 1.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—8 P.M. Mr. Percy Dunn will show a Heart with Ante-mortem Clots in Right Ventricle which have Suppurated; Abscess in the Brain of a Child aged eight; Primary Scirrhus of Liver.—Mr. Burrows will show some Experiments with Pancreatine.—Mr. E. Hurry Fenwick: Latent Calculus.—Mr. Bruce Clarke: A case of Cancer of the Prostate.—Mr. C. B. Keetley: Antiseptic Surgery at the West London Hospital.

ROYAL INSTITUTION.—1.30 P.M. Annual Meeting.—9 P.M. Lord Rayleigh: Water Jets and Water Drops.

Saturday, May 2.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

WHAT DEATH-RATE CHARACTERIZES A "PERFECT PARADISE."

A MEMBER of the Romford Local Board considers that locality a "perfect paradise." The reason, apparently, of his enthusiasm is hygienic rather than sentimental. It seems that the Local Board began its existence in 1854 with a death-rate in their district of 28 per 1000. By means of hard work and judicious administration this is now reduced to 15·8 per 1000. Though the Board has certainly something substantial on which to congratulate itself, Dr. Richardson would tell them that the goal of a hygienic paradise was still a long way ahead.

Dr. J. Weaver.—We think it would be premature to notice the matter, as the gentleman in question has not yet, we believe, been formally asked to come forward as a candidate.

G. B. (East Finchley).—We cannot insert the appeal. Perhaps an application to a society such as that in St. George's-road, S.W., might be useful.

"WHOOPING-COUGH."

To the Editor of THE LANCET.

SIR,—In reply to Mr. Burman I beg to state—(1) The paroxysms of whooping-cough are, in my experience, always more frequent at night, whether the patient sleeps or not. (2) I have noticed that they are most frequent about 2 or 3 o'clock in the morning, at which hours the air is most chilly and the temperature of the body lowest. (3) The child awakes from sleep, evidently suffering from a sense of irritation in the throat, and cries at the unconquerable tendency to cough, which it seems to dread; but the more profound the sleep, the less is this tendency. (4) Cold and exposure appear to induce attacks quite as frequently as the act of deglutition.

The treatment of this disagreeable and fatal malady will, of course, depend upon the theory framed as to its exact nature. Though generally induced by direct infection, whooping-cough frequently follows attacks of bronchitis and ordinary catarrh. I regard it as essentially a subacute inflammatory condition of the mucous membrane of the larynx. In its first stages there is no noticeable whoop during inspiration, but simply a short cough. This becomes more prolonged as the disease progresses, until, when the paroxysms are most intense, every particle of air seems to be expired in a rapid series of what might be termed "glottic explosions," and the child, now almost suffocated, again inspires, the air producing a falsetto note by reason of the contraction of the vocalising muscles during the inspiratory effort. The phlegm secreted is at first purely of a mucous nature, but as the disease develops and becomes chronic it assumes a muco-purulent character. The presence of a parasitic organism is, I consider, the result, not the cause, of the disease, and is, I should think, never noticed in its earlier stages, but only when, from the continued inflammatory action, the parts have become prostrated in vital power, and unable in consequence to resist its growth and development in their vicinity.

I have found a popular remedy very efficacious in the treatment of whooping-cough. I refer to picked oakum worn by the patient either round the neck in muslin or on the chest as a pad stitched to the underclothing. *Locally I apply the glycerine of tannic acid with a laryngeal* brush two or three times a day, and internally I prescribe one-, two-, or three-grain doses of chloral, one, two, or three minims of belladonna, one grain of alum, and one minim of carbolic acid, in syrup, every two or three hours. A liniment of turpentine, acetic acid, and yelk of egg is an excellent application for the chest, back, and neck night and morning, with the liniment of belladonna added in the proportion of 1 to 7. In children of two years or more, I have applied carbolic acid and glycerine, in the proportion of 1 to 15, to the larynx with success, each application checking a paroxysm at once. With the above-mentioned treatment I cure the worst cases in from seven to ten days.

I am, Sir, yours truly,

Clayton-le-Moors, April 16th, 1885. C. R. ILLINGWORTH, M.D.Ed.

PROVIDENT DISPENSARIES.

PROVIDENT DISPENSARIES may be very good things; but they may be abused, either by being made available for persons who are not entitled to use them, or by being made the means of indiscriminate advertisement in handbills scattered broadcast. A bill of this kind has been sent us from Cardiff with the names and addresses of ten or twelve medical men.

Mr. J. L. Stretton.—We do not perceive any legitimate ground for interference.

"DISINFECTANTS."

To the Editor of THE LANCET.

SIR,—Your report of the paper recently read by Mr. Wynter Blyth before the Society of Medical Officers of Health on the "Action of Disinfectants on Microzooids" (see THE LANCET, April 4th, 1885, p. 621), will doubtless interest those investigators working in the discovery of bacilli and of germ-destroying agents. The facts connected with the properties of the pyridine bases, as disclosed in the valuable researches of Mr. Wynter Blyth, and referred to in the paper read before the Society, are of considerable import, and fully confirm the views and opinions of previous observers who have studied the compounds named. It may be of interest to state that they may now be obtained commercially in quantity; and that disinfecting powders and fluids containing a proportion of the bases in conjunction with carbolic acid are already in the market. Fluids also containing these substances are in successful use as washes for exterminating scab, acari, and parasites in sheep and other animals. Referring more generally to the pyridine bases, it may be mentioned that in an article appearing in the *Boston Medical and Surgical Journal* for July 14th, 1881, pointing out the high value and utility of certain phenylic washes (used at the Massachusetts General Hospital in the antiseptic treatment of surgical cases) that were found to be practically free from carbolic acid, and concerning which there was some speculation as to the active constituent, it was ultimately found that these compounds were present in sufficient quantity to impart the character observed, and to which Mr. Wynter Blyth now points as bacillus-destroying agents of great potency. From my own knowledge and observation, I would venture to predict a wide rise in the future employment of these basic compounds for the treatment of various skin diseases of parasitic origin, used either in aqueous solution or as pure substances, and would commend them to the notice of medical practitioners for this purpose. Having prepared and supplied the pyridine bases referred to and used by Mr. Wynter Blyth, I shall have much pleasure in furnishing samples to those investigators who may wish to make trial of their specific qualities. I am, Sir, yours faithfully,

BENJAMIN NICKELS, F.C.S., F.I.C.

Leadenhall-street, E.C., April 20th, 1885.

Mr. W. Brown.—The drug should be given with great care. Pregnancy does not absolutely forbid its administration.

Mr. L. Hudson.—Vacancies are announced in our advertising columns.

"MEDICAL PRACTICE IN THE UNITED STATES."

To the Editor of THE LANCET.

SIR,—I presume I, as a graduate of New York, must answer the questions of "Medicus" in your issue of the 11th inst. As a general rule, respectable medical colleges in the United States require the last course of lectures to be taken out, and the passing of a practical examination, before granting an *ad eundem* degree. It does not much matter where the applicant has previously studied, or what qualifications he possesses. I may add, however, that with the qualifications your correspondent holds he would not be debarred from practising in any portion of the States; but he might have difficulty in a legal matter if involved therein. "Medicus" will not, however, find it a matter of so much difficulty as it is in the mother country for a foreign practitioner to carry on his profession; and he may rest assured that if he makes the acquaintance of the authorities in any State where he wishes to reside he will have every courtesy shown him, and every facility given to make him acquainted with anything he may wish to know. There is not that exclusiveness in friendly relations betwixt caste and its privileges *versus* new comers as is generally maintained in old countries.

I am, Sir, yours faithfully,

April 13th, 1885. AN M.D. OF NEW YORK.

CASCARA SAGRADA FOR CONSTIPATION.

To the Editor of THE LANCET.

SIR,—With reference to the subject of the action of cascara sagrada, which has lately been discussed in your columns, I beg to say that for the last two years I have taken it for the relief of habitual constipation arising from sluggish action of the liver, and have found its effects upon myself somewhat different from what your correspondents describe. It has always acted as an efficient hepatic stimulant, as evidenced by the increase of the fæcal colouring matter, but only as a mild intestinal one, and that without producing any pain or griping. I take it uncombined in the form of one-drachm doses of the liquid extract of Messrs. Southall Brothers. In a case of severe constipation in which I lately prescribed it, combined with large doses of tincture of belladonna and nux vomica, it caused considerable griping, and acted most powerfully on the intestines. The preparation dispensed was that of a different firm from the one I myself use.—Yours truly,

April 6th, 1885. T. L. K. DAVIES, M.B.

THE MISCARRIAGE OF MEDICAL EDUCATION.

Dr. Bernard O'Connor.—It is not profitable to cry over spilt milk, or to waste time in debating the question, Who were responsible for the miscarriage of medical legislation last year? Happy are those who feel themselves free from blame! Dr. O'Connor thinks Dr. Farquharson's explanation satisfactory. We do not.

A CASE OF MISSED LABOUR.

To the Editor of THE LANCET.

SIR,—A short description of the following case may be of interest to some of your readers.

On the evening of July 22nd, 1884, I was called to see Mrs. M. T——, a patient who had been expecting her second confinement, when she gave me the following history:—She last menstruated at the end of September or beginning of October, 1883, but was not sure of the time of quickening. The pregnancy was perfectly natural up to the middle of April, 1884, when the movements of the fœtus, which had been well marked, ceased. From this time she did not increase, but rather diminished, in size, and immediately a cold heavy weight was constantly felt in the abdomen, and a discharge, sometimes of blood, sometimes of yellowish slime, began. On the morning of July 22nd, 1884, labour pains commenced, the waters breaking, and a large quantity escaping. She expressed herself as having been in fairly good health up to this time. Her only child was nine years old, the husband having been absent at sea for a long period. On my visit at 10 P.M., I found a healthy-looking Scotch woman, aged thirty-three, not suffering from any labour pains, with the uterus projecting two inches above the umbilicus, and some loose membrane protruding from the os, which was rigid and would only just admit the point of the finger. Her general condition was good.—23rd: Sanguineous discharge all night; uterus level with the umbilicus; os the same size. There was some slight attempt at labour pains.—24th: The uterus and os in the same state; a small piece of membrane was discharged. There were no pains.—25th: Discharge becoming offensive.—26th: Feverish symptoms and rigor; portion of hairy scalp passed; discharge fetid; slight tenderness over the uterus. Up to this date the treatment had consisted of the administration of ergot and antiseptic injections, but the symptoms having become serious I obtained permission to interfere. On the 27th, the patient being under chloroform, I introduced my forefinger through the rigid os and felt the skull, denuded of its scalp, presenting. An attempt was then made to dilate the os with the fingers, but the part was so rigid that an extensive laceration was made. The skull was now taken away piecemeal; finally the remainder of the fœtus was extracted, the entire placenta following, and the uterus was washed out. The fœtus was apparently between the sixth and seventh month. Extensive decomposition had set in, the muscles of the back being bare. All went well with my patient until the third day, when, in spite of constant antiseptic uterine injections, a severe rigor occurred, and a sharp attack of septicæmia followed. Four weeks after this, when almost convalescent, she had a relapse, and for six weeks was very ill with peritonitis. However, in the end, she got the better of her septicæmic symptoms, but was left in a terribly emaciated condition. At the present time she has regained her former weight, looks remarkably well, is able to attend to her domestic duties, and has menstruated regularly three times. There is some erosion of the os consequent on the laceration.

I am, Sir, yours faithfully,

Devonport, April 7th, 1885. W. W. PRYN.

"WORCESTER URBAN DISTRICT."

To the Editor of THE LANCET.

SIR,—In your remarks on the eleventh annual report of the Medical Officer of Health for the City of Worcester you state: "In seeking advice the opinion of the borough analyst has been sought, especially as to whether filtration would secure the inhabitants against 'this great source of danger' (i.e., 'pollution by the germs of disease'), and he has answered, 'If efficiently carried out, I believe it does.'" My opinion has neither been asked nor given. I have merely sent reports giving an opinion which Dr. Strange has quoted in his report, and which certainly do not bear out such a statement. Dr. Strange, in making the remarks you quote, was referring to a question which he asked himself and answered himself in his tenth report. When the Kidderminster sewage pumps broke down, and the typhoid excreta of 300 patients was discharged into our waters, I had very grave apprehensions of what results would follow, and must confess that I was agreeably surprised that the danger was at any rate minimised by the effective condition of our filter beds; but it was an experiment so perilous that I should not like to see it repeated. My report, which to avoid a panic was sent in privately and not for publication, clearly showed what I thought of the danger.

I am, Sir, yours faithfully,

HORACE SWETE, M.D.,

Analyst to the County and City of Worcester.

Worcester, April 11th, 1885.

*** On again reading Dr. Strange's report, we find that the expression of opinion as to what filtration can do is his own, and not Dr. Swete's, whom we failed to identify as the analyst referred to. We were misled by the words in question being quoted in inverted commas in a sentence which in the same way quotes Dr. Swete's opinion as to the benefit of filtration carried out.—ED. L.

EARTH-CLOSETS.

Alpha.—If earth-closets be properly constructed and properly managed, we know of no objection to their use in-doors. The best form of closet to secure is the one manufactured by the Moule's Earth-closet Company, which received the Gold Medal of the International Health Exhibition. Its special feature consists in the very efficient manner in which the dry earth is uniformly distributed over every portion of the excreta in the receptacle. The size of the pail will necessitate frequent emptying, and this is a distinct advantage in the case of an in-door earth-closet. Our correspondent should remember that the earth must be *dry*, and *finely divided* by passage through a sieve, and then, apart from excessive wetness of contents, careful supervision is alone necessary to ensure success.

Justice.—1. Yes.—2. Yes.—3. No; but the presence of another medical practitioner is frequently desirable, as he could be called upon to give confirmatory testimony.

M.D., *Late Assistant*, and *Cedric* have not enclosed their cards.

FALSE TITLES AND THEIR BASE USES.

To the Editor of THE LANCET.

SIR,—We are constantly reading in your Answers to Correspondents that certain titles do not carry the right to the prefix of "Dr." With this I entirely agree. I think it is time, and even necessary, for some protest to be made against the increasing practice of addressing medical men who are not M.D.'s as "Dr." Of course, of the lay public, who do not know better, we cannot complain; but I do protest against medical men themselves addressing others, whom they know are not entitled to the designation, as "Dr." this and "Dr." that, not only in the course of conversation but in correspondence. This practice is even now becoming common with societies composed of medical men; only during the last week two medical associations, obtaining my name I presume from the Directory, wherein I appear as "L.R.C.P. Lond." and "M.R.C.S. Eng.," addressed me as "Dr." To my mind this system of mutual "back-scratching" is bad form, undignified, and unbecoming amongst members of a learned profession, and calculated to bring us into ridicule and contempt.

Allow me to recount a true tale to point a moral. Not many years ago, in the metropolis, there was a post vacant for a medical officer of health. There were many candidates, for it was a good appointment, and amongst them were two special favourites in the betting. The first favourite, having very great influence, was considered bound to win; but he had always been in the habit of calling himself "Dr.," had "Dr." on his door-plate and "Dr." on his visiting card, and naturally by the public was thought to be an M.D. But he was not; he was simply L.R.C.P. Ed. The second favourite was plain "Mr." At the meeting of the vestry for the final settlement of the conditions of election, the principal supporter of the first favourite suddenly hit upon a brilliant idea, as he thought, to oust the second favourite and to secure for his friend the appointment. He therefore proposed and carried that it should be a *sine quâ non* that the future medical officer of health should be M.D. One can imagine the tableau when, on rushing off to tell his friend the clever electioneering trick he had succeeded in, the latter had to confess he was a sham, and not M.D. after all!

I am, Sir, your obedient servant,

April 11th, 1885. ANTI-HUMBUG.

AGORAPHOBIA.

To the Editor of THE LANCET.

SIR,—Can any of your readers suggest a treatment for what I suppose I may call a case of agoraphobia? My patient is a young lady aged twenty-two, with a tendency to constipation and occasional attacks of hæmorrhoids. The first symptoms of a dislike to going out alone showed themselves about two years ago. She was for a long time ashamed to speak of this, and made all kinds of excuses to avoid the necessity of a solitary walk. But now she dare not walk twenty yards alone. If any chance compels her to do so, she feels almost paralysed, unable to stir, and violent palpitation comes on; but if a friend joins her, she can walk actively and for a considerable time, and will appear bright and happy and in apparently perfect health. There is no organic heart disease, and the catamenia are regular. No cause can be assigned for the commencement of the affection. Tonics, such as iron, nux vomica, and arsenic, have been used, also the bromides of potassium and sodium. The family history is good. Any hints as to treatment would be highly acceptable. I am, Sir, yours faithfully,

Bradford, April 18th, 1885. W. HILL EVANS, M.D.

"IMPROVED FRACTURE BOX."

To the Editor of THE LANCET.

SIR,—In your last issue Mr. T. G. Nasmyth says that he has already used a fracture box similar to mine for two years. Permit me to state that I think he does not quite understand the construction of the apparatus for which I claim invention. 1. He does not allude to the sliding reversible splint which forms one of the sides of my fracture box. 2. No one has as yet used a hinged foot-plate with such a regulating screw as I have devised. 3. There is no ratchet, as it would add to the cost. 4. Ferguson has already used perforated splints, but not as I do—as a means of attachment; and to Rhases, an Arab doctor of the twelfth century, belongs the invention of keeping fractures in position by straps.

I am, Sir, your obedient servant,

Middleton Hospital, April 20th, 1885. JAMES J. FOLEY, M.R.C.S.E.

BLOOD-POISONING TREATED BY HYPODERMIC INJECTION OF CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—I think the following mode of treatment of a not unfrequent and sometimes fatal condition worthy of note.

R. S——, a slim, delicate-looking lad, aged sixteen, received a cut from a knife charged with putrid matter across the palmar aspect of the third and fourth fingers of the left hand. On the morning of the second day after the occurrence the patient felt chilly and generally unwell. On my arrival, a few hours afterwards, I found the lymphatics of the arm inflamed, tenderness of the glands in the axilla, and a temperature of 101·4° F. Nine hours afterwards the patient complained of sickness, with occasional vomiting, and increased pain, with stiffness in the axilla. There were a more diffused redness of the limb and a temperature of 103·8°. I now injected six minims of a 4 per cent. solution of carbolic acid into the unaffected arm. After twelve hours the patient felt better, and the temperature had fallen to 101·8°. The injection was repeated, and no local applications were used. The patient then rapidly recovered, and in twenty-four hours every symptom had disappeared. I am, Sir, your obedient servant,

Wick, April 11th, 1885. A. G. AULD, M.B.

W. T. H.—The lectures on Medical Jurisprudence delivered at any of the medical schools would meet the requirements of our correspondent. He can take out a single course without having entered as a medical student.

T. S. K.—Application might be made to the Hospital in Queen-square, or to the Institution in Portland-terrace, Regent's-park.

Mr. Frederic Hewitt.—The paper is marked for early insertion.

THE TITLE OF "DOCTOR."

To the Editor of THE LANCET.

SIR,—I see the Colleges of Physicians and Surgeons are about to take into their consideration, if they have not already done so, the propriety of allowing the Licentiates of both institutions to take the title of "Doctor." Will they extend their consideration a little further—namely, to the repayment to those who have taken, besides their licences, the degree of "Doctor" at a University, with the expenditure of a considerable amount of inconvenience, time, and money, on account of the higher standing this title, so honourably obtained, was supposed to confer upon them? If they do not do this, I for one must consider I have been mercilessly robbed. It is singular that the outcry of a few who have no right whatever to complain, inasmuch as they have never subjected themselves to these inconveniences, &c., should be able to overthrow and reduce to no value the labours of those who have undergone them all. I am, Sir, yours obediently,

April 22nd, 1885. M.D.

G. P.—We do not understand the question as it is put.

A Medical Student.—We cannot notice the "miserable" print.

ERRATUM.—In our leader on Reform at the College of Surgeons, p. 713, col. 1, line 4 from bottom, "The Board of Examiners" should be "The *Court* of Examiners."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Suckling, Birmingham; Mr. Annandale, Edinburgh; Prof. Geo. Buchanan, Glasgow; Prof. McKendrick; Mr. W. F. Somerville; Mr. Macdougall, Chesterfield; Mrs. Tillett, Dudley; Mr. Birchall, Liverpool; Dr. Herbert Snow, London; Mr. Fred. Neves, London; Mr. Reginald Harrison, Liverpool; Mr. Dittridge, London; Mr. Alder Smith, London; Mr. Pearse, London; Dr. Cook, Tendring; Mr. Freeman, London; Dr. Illingworth, Clayton-le-Moors; Mr. M. G. Evans, Cardiff; Mr. Aikman, Guernsey; Dr. Hawksley, Brighton; Mr. R. T. Manson, Darlington; Dr. W. H. Evans, Bradford; Dr. Pacchiotti, Turin; Dr. Wright, Southport; Mr. Cadge, Norwich; Mr. G. A. Kenyon, Chester; Mr. Lewis, Birmingham; Messrs. Hemming and Son, Cheltenham; Mr. Martin, Crawley; Mr. Russell, Liverpool; Mr. Fuge, Taunton; Mr. Saunders, Manchester; Messrs. Pemberton, Manchester; Mr. Bourne, London; Mr. Gray, S.E. Coast, America; Mr. Rigden, Canterbury; Dr. Alfred Meadows, London; Mr. B. R. Datt, Calcutta; Dr. O. N. Royle, Jersey; Mr. J. L. Stretton, Kidderminster; Dr. J. E. Morgan, Manchester; Mr. Leopold Hudson, London; Dr. W. Curran, London; Mr. Blandy; Dr. D. B. Pestonji, Bombay; Dr. Bernard O'Connor, London; Dr. T. I. Rowell, Singapore; Dr. W. Ewart, London; Mr. T. Deane, Birmingham; Dr. G. Oliver, Harrogate; Dr. Oxley, Liverpool; Mr. Macdonell, London; Mr. T. W. Thompson, Potter's Bar; Messrs. Richardson and Co., Leicester; Mr. W. H. Pearce, London; Mr. O. Dwyer; Mr. Young, Ardsley; Messrs. Wilkinson and Co., Borough; Miss Hertz, Manchester; Mr. J. Marsh, London; Dr. Seaton, Sunbury; Dr. Lewers, London; Rev. O. Allen, Tetsworth; Messrs. Ingram and Royle, London; Mr. Russell, Liverpool; Mr. Berthier, Paris; Mr. Chatfield, London; Mr. Charmers, London; Messrs. Mulliner and Co., Northampton; Messrs. Mackay, Edinburgh; Dr. Leiterchofen, Homburg; Messrs. Sydenham and Co., Bournemouth; Messrs. Smith and Son, Manchester; Mr. Rich, Leeds; Mr. Kuyle; Mr. Hopkinson, Nottingham; Mr. Leggatt, London; Dr. Heelas; Mr. Brown, Westgate-on-Sea; Mrs. Bourchier; Messrs. Lumley, London; Mr. W. H. Kesteven, London; Mr. Clifford, London; Mr. F. W. Hewitt, London; Mr. P. Birch, London; Dr. Spooner, Clapton; Dr. Horrocks, London; Mr. G. Duncan, Berlin; Dr. C. S. Taylor, London; Mr. Foley; Mr. W. A. Ellis, London; Mr. Elkerton, London; Mr. F. W. Friend, Douglas; Mr. Forfar, Silvertown; Dr. Farquharson, London; Mr. H. Willson, London; Messrs. Dolman and Pearse, London; Mr. Ford, Devonport; Mr. Martin, Southport; Mr. Unsworth, Liverpool; Dr. Squire, London; Mr. Craske; Mr. Brooks, Hull; J. H., Manchester; S. P.; K. D. M.; H. O. M.; M.D., Shepherd's-bush; J. B., Glasgow; Zero; Physician, Edmonton.

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DICAL DEPART

Clinical Lecture

ON

CONGENITAL TUMOURS.

Delivered at the Manchester Royal Infirmary,

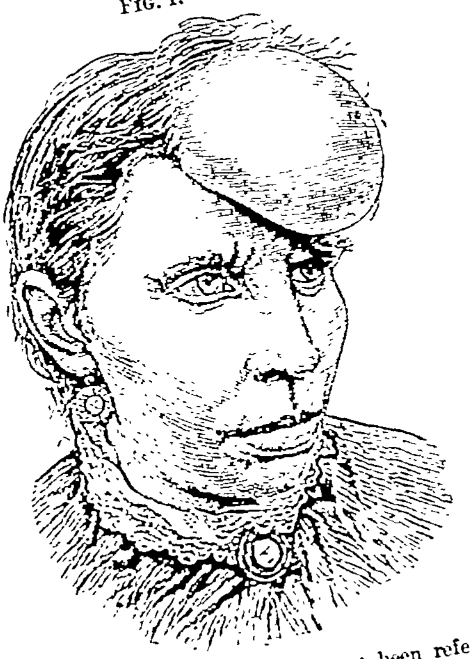
BY JAMES HARDIE, F.R.C.S.,
SURGEON TO THE INFIRMARY, AND LECTURER ON CLINICAL SURGERY AT OWENS COLLEGE.

GENTLEMEN,—Having recently had in my wards several cases of congenital tumour, I propose to take the opportunity which they afford of drawing your attention to a class of cases which cannot be frequently well illustrated in a general hospital. By the term "congenital tumour," I do not mean to include all tumours which may be met with congenitally, nor do I mean to exclude all tumours whose existence is not evident at the time of birth. The cases I refer to are those of tumours which are dependent on and arise from mere developmental errors of the normal tissues. They are associated with the growth of the embryo, and as a matter of fact, have nearly always grown to such a size at the time of birth as to be recognisable at that period, or very shortly after it. The errors of development which produce these tumours may be classified as follows: (1) Included fœtation; (2) dissociated blastoderm (dermoid cysts); (3) tissue hypertrophy (fibro-fatty tumours, cystic tumours, and nævi).

1. *Included fœtation: attached fœtus.*—In the development of the blastodermic vesicle the normal course is the formation of a single embryonic area, and subsequently of a single primitive streak and a single medullary groove. If, however, a double embryonic area be formed, two embryos will result in place of one only; and if these areas come in contact, a fusion of the two, to a greater or less extent, may take place. As a result there will be a double fœtus. The degree of attachment in such a case may vary from a mere band of soft tissue, as in the well-known case of the Siamese twins, to an extensive coalescence and fusion of a part of the skeleton. The latter result is the more likely to occur, according as the duplication supposed takes place at a later period than the appearance of the embryonic area. Instead of being merely "attached" in the manner indicated, the coalescence may be so complete that one of the germs may be surrounded by the advancing development of the other, and its growth seriously compromised. Thus it might occur that a limited portion only of the parasitic fœtus attains full development, and monstrosities of various kinds be thus produced. Projection of one or more limbs of the parasite from the body of the host is an ordinary example of such a monstrosity. It may even happen that at the time of birth the inclusion may be still complete, and the abnormal condition only become manifest by the sprouting forth of the parasitic members at a later period. While these various forms of monstrosity are sufficiently interesting from an embryological point of view, they have very little of surgical interest in them; and I have alluded to them merely to give an aspect of completeness to the subject I am dealing with. We pass on to a class of cases to which the appellation of the term "tumour" is strictly accurate, but whose genesis may still be referable to the same errors of development as have produced the exaggerated condition I have just mentioned—that is to say, to fœtal attachment or inclusion. Closely connected with certain parts of the body, more particularly with the sacrum, the ovary, and the testis, tumours are sometimes met with of a cystic formation, containing a quantity of more or less developed fœtal structures, such as cartilage, bone, viscera, skin, hair, or sebaceous matter. It is probable that here, again, there has been a fusion of the germs of two individuals. It has, however, been more complete than in the former instances, and, from certain causes operating at a very early period, probably from the cutting off of its proper blood-supply, the due development of the included fœtus has been arrested. It thus comes to be dependent for its nourishment on the blood-supply of that part of the host to which it is more particularly attached. As this would generally be provided by vessels of insignificant size, the quantity [illegible] will be too niggardly to permit of more than a very tardy and incomplete growth of the aberrant structures. If I except, possibly, one or two ovarian tumours, I cannot refer you to any example of this class of tumour in my own practice; but I remember very well the case of a young woman who was under the care of Professor Lund in this infirmary, and who had what, I believe, was such a tumour, situated between the sacrum and rectum. In such cases the question of operative treatment will frequently arise, and it will depend largely on the extent of the dissection required to extirpate the growth.

2. *Dissociated blastoderm.*—I have said that the foregoing cases are probably due to the inclusion of a second fœtus. The implied reservation has reference to the mode of origin of the next class of congenital tumours which I have to mention. We have seen how the germ of one fœtus may be enveloped in that of another, and cut off entirely from its proper connexion with the maternal structures. It becomes displaced and detached. In a similar manner you can understand how, in the process of evolution and growth of the layers of the blastoderm of a single fœtus, there may be an inclusion and separation from its proper connexions of some portion of one or other of the three layers. I shall speak to you immediately of cases of tumour which, by common consent, are explained in this way; but it is possible enough that some of those which I have just been referring to, which contain fœtal elements of various kinds, may, in reality, have been produced by some dislocation of the blastoderm of the subject, and not by fœtal inclusion. Probably one would determine the matter by the degree of variety of the contents of the tumour in question. The cases which appear undoubtedly to arise in the former manner are those whose contents consist simply of structures belonging to the skin and its appurtenances. Such tumours are of comparatively frequent occurrence, and are denominated dermoid cysts. They are met with most frequently in the ovary, under the roof of the orbit, in the neck, and on the head. They are to be regarded as due to a displaced piece of epiblast, which, slowly growing according to its original character, in its foreign soil, presents in process of time an epidermal sac with included sebaceous matter, hair, teeth, or, it may be bone, according to the situation to which it primarily belonged. A good example of such a tumour you saw lately in my female ward. Mrs. ——, aged thirty-eight, had a tumour over the middle of the forehead. (Fig. 1.) At birth it was about the size of a marble, and it had gradually increased to be larger than a fist. Situated where it was, there appears to have once been a suspicion that it might be an encephalocele, and operation was not advised. At the time we saw the patient

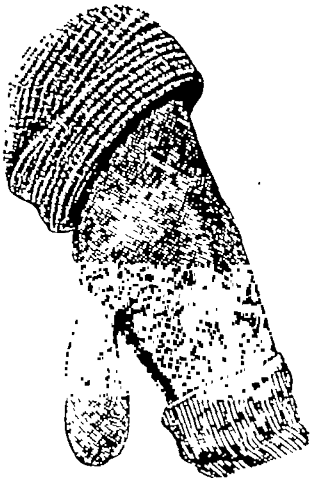
FIG. 1.



however, we were at once satisfied of its real character by the peculiar feeling it had when taken between the fingers. It was easily compressible, and felt somewhat like a bladder of half-melted tallow. For some distance around the most prominent part the skin was closely adherent to the tumour; elsewhere it was separated by cellular tissue. I exposed the growth by a crucial incision, taking care to include a considerable portion of skin, for the reason that this structure in such a case is not simply stretched over the surface, but actually redundant. The dissection was easily accomplished, and the tumour removed from a saucer-like depression in the frontal bone. At one small spot there seemed to be complete perforation of the bone. The tumour consisted of a thin cyst-wall, containing sebaceous matter in various stages of softening and numbers of long fine hairs. You see from the appearance of the patient to-day that the wound healed with a scarcely perceptible scar. All such cases occurring on the surface of the body are readily removable by excision.

3. *Tissue hypertrophy.*—At almost any period of life there may be a tumour formation from a simple overgrowth of some texture or organ, as in the case of fatty tumours or of adenoma of the mamma; but in the fœtus, in which the process of growth is so exceedingly active, there would appear to be a peculiar tendency to such an accident on the part of certain tissues, in consequence of which we have the formation of certain tumours almost peculiar to this period. Occasionally there is met with a congenital hypertrophy of the whole of the structures of a limb or other part of the body; but the tissue which is more especially prone to this excessive development is the ordinary connective tissue, with its contained fat. To a less extent the skin may be similarly affected, and in another class of cases the cutaneous and subcutaneous bloodvessels. In an individual case there may be hypertrophy of all of these tissues, but it is usually most pronounced in one or other, and different varieties of tumour due to this cause are accordingly recognised.

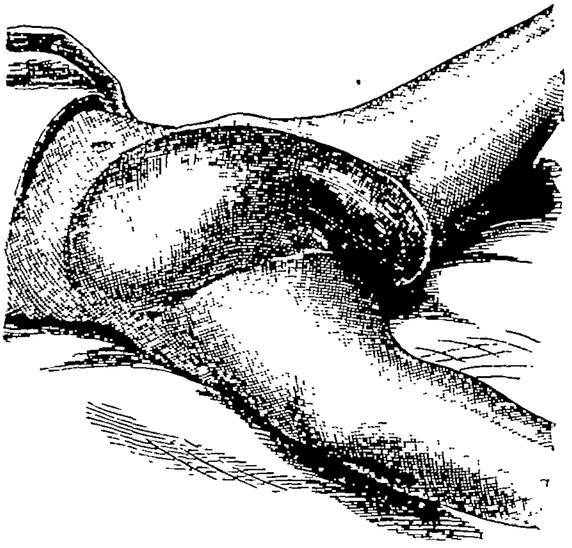
FIG. 2.



I show you here (Fig. 2) the photograph of a congenital tumour hanging from the back of the leg of a man aged thirty-two, who was a patient here some time ago. At birth, it would appear, it was quite small; but as he advanced in life the tumour steadily increased in size, until it measured five inches in length by three in width at the time he presented himself to have it removed. It was attached to the leg by a flattened pedicle about an inch in diameter, and evidently had no connexion with the deep structures. It was uniformly firm in consistence, but not so dense as a fibrous tumour. The skin which covered it was coarser in texture than that in the neighbourhood—a circumstance which may have been an original character of the growth, or which may have been occasioned by the repeated inflammatory attacks to which it was subject by the friction of his clothing. It was on account of this frequent accident that the patient at length determined to have it removed. This was accomplished easily enough. The tumour was found to be an outgrowth of the subcutaneous connective tissue, and on section it presented the appearance of coarse bands of fibrous tissue, with loculi containing fat. Such tumours or hypertrophies are not always so easily dealt with. They are not always pedunculated, but sometimes form ill-defined projections from the surface with wart-like hypertrophy of the skin. At other times the condition met with is an overgrowth of the whole of the skin and cellular tissue investing the distal portion of a limb, as the foot or hand, or one or more fingers or toes. In some cases the fatty, in others the fibrous, tissue predominates; and occasionally there are small cyst-like interspaces containing clear fluid.

This last condition leads us on to the next variety of tumour which I have to mention to you—viz., the congenital cystic tumour. In the previous case the occurrence of cysts is a rare event, and is to be regarded as merely accidental and of little importance. In the case of the tumour I am now speaking of, however, the cystic formation is the essential feature. Of all parts of the body, it is most frequently met with in the neck, and, although also occurring in other parts of the trunk, has never, according to Mr. T. Smith, been met with in the limbs. This tumour has its origin in the connective tissue under the deep fascia. It can usually be ascertained to be intimately connected with some portion of the deep fascia; but as it grows it forms a well-defined tumour separated from the surrounding structures by cellular tissue. It consists partly of solid and partly of cystic tissue, and there is every variety in the proportion of the two constituent parts. In the neck, it is sometimes met with as a single dense walled cyst containing thin straw-coloured fluid, which some people call a hygroma. Some time ago there was such a case under my care here, in a young man aged eighteen. The tumour was the size of a duck's egg, and was situated in the posterior triangle. I dissected it out and the case did well. It is better to treat them thus than to annoy your patient and yourself with setons, injections, and so forth.

FIG. 3.

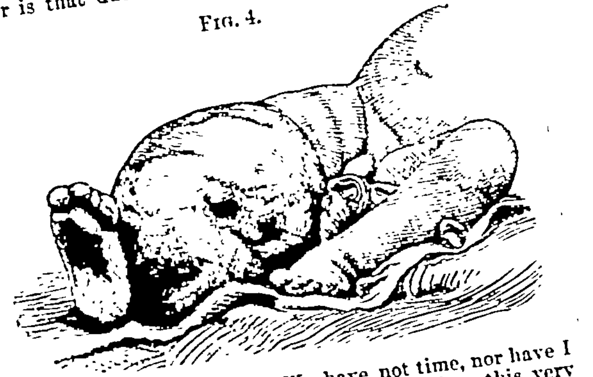


In other cases the cysts are multiple, and for the most part intercommunicate. The case of L. L——, a girl aged six years, sent to me by Dr. Cran, and whom some of you saw, was a good example of such a case. There was a tumour lying in the right groin, extending from the anterior superior spinous process into the labium. It was evidently attached to the abdominal wall, though it had turned over and had obscured Poupart's ligament. There was not much doubt as to its nature, particularly when regard was had to the fact of its being a congenital tumour. At birth it was about a fourth of the size, and it was still growing when the patient came under observation. In the upper part of the thigh, quite separate from this tumour, there was a second swelling about the size of a hen's egg. It was soft, projected but little above the surface, and had no very distinct outline. The parents knew nothing of this second growth, and in the absence of any history I came to the conclusion that it was probably a self-cured nævus. (Fig. 3). I treated this case by making a single incision over its entire length and dissecting it out. Its most intimate attachment was to the aponeurosis of the external oblique, more particularly to that part of it which forms the external pillar of the inguinal canal. To this it was so closely adherent as to appear to have grown from it. Elsewhere its connexions were loosely cellular. The second tumour was not interfered with, nor do I think that it will ever require interference, as it appears to have diminished somewhat in size since the time when the child was in the hospital. I show you the tumour, and, as you will perceive, it is composed of a number of intercommunicating cysts of various sizes, from a hen's egg to a pea, with dense fibrous septa; they contained amber-coloured fluid.

Here is another such tumour which I removed from the front of the neck of a child five months old. It is the size of a large orange, and was growing so rapidly as to be placing the child's life in imminent peril. It had pushed itself under the edges of both sterno-mastoids, and had very close attachments to the surrounding parts, so that its extirpation was difficult and tedious. Happily, however, this was at length accomplished, and its removal gave new life to the child, who soon became quite chubby. You see that the section of this tumour closely corresponds with that of the other, except that the cysts are smaller and more numerous, and that the septa are thicker and in places of gristly consistence. The usual explanation given of the formation of the cysts in this form of tumour is that they are due to an expansion of the normal lymph spaces in the cellular tissue. I cannot say that this explanation is very satisfactory to my own mind; I cannot, however, suggest a better; and if this be the correct pathological explanation, it certainly stamps these congenital growths with a peculiar individuality.

The last variety of congenital tumour to which I have to refer is that due to an overgrowth of vascular tissue.

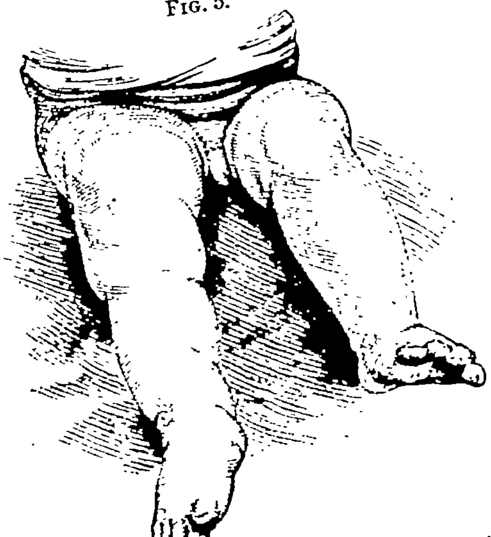
FIG. 4.



This is the familiar nævus. We have not time, nor have I the wish, to enter at present at any length into this very extensive subject, either as regards its pathology or its treatment. You must, however, regard nævus as due to this same peculiarity of certain tissues, in the fœtal condition, to take on an abnormal development, to which I have been referring. Nævi occur with by far the greatest frequency in the skin, or in the subcutaneous cellular tissue. They are occasionally met with in bone and in glandular structures. In some examples the capillary system is probably that in which the affection has its origin, but coincident with this there also occurs an overgrowth of the efferent vessels. There is a multiplication and dilatation of both sets of vessels, while the basis tissue is reduced to very small dimensions. In other cases the capillaries are of normal size, while there is a varicose dilatation of the venules, which push aside the intervening tissue so as to produce a well-defined tumour of turgid vessels embedded in the surrounding parts. When the growth is excised it presents a shrunken trabecular structure. Sometimes this affection causes a more florid colour of the skin, which may be but slightly elevated. At other times the subcutaneous tissue is also more or less involved, and in a third variety the affection is situated in the subcutaneous vessels exclusively, producing a more or less prominent subcutaneous tumour.

I will illustrate this variety of congenital tumour by referring to an important case which came under my care some time ago. This nævus was certainly one of the largest and most formidable which has ever been met with, as you may judge from the photograph which I pass round. (Fig. 4.) It was also of much interest from the successful issue of the very simple method of treatment which I adopted. As you see, the tumour involved the whole of the leg from the knee to the ankle for two-thirds of its circumference. The child was brought to me when only a fortnight old, and when the part was uncovered, its aspect was certainly alarming. The circumference of the affected leg was nearly three times that of the other. The surface was of a bright-red colour, and the skin was in some places so thin that it appeared as if rupture might take place at any moment. The tumour was growing with great rapidity. I feared that amputation of the limb was the only resource open to me; but observing how materially I could diminish the size of the growth by grasping it firmly in my hand, it occurred to me that something might be effected by means of continuous pressure. To this end I bandaged it carefully with elastic webbing, trusting that by compressing the vascular network and at the same time inducing a certain amount of inflammatory effusion into its basis structure, permanent obliteration of the vessels might be produced. This treatment was entirely successful. I was anxious that I should not cause ulceration of the surface, and therefore reapplied the bandage, with but moderate tightness, daily for a few times; but on taking it off, even on the second day, the delicate cutaneous envelope gave way in numerous places, with the immediate result, of course, of an outburst of blood—a very serious matter in so young a child. The part was instantly grasped, however, and the bandage reapplied. After a few days I had the satisfaction of finding the growth becoming solidified and diminishing rapidly in size. In a fortnight's time, I may say, the nævus was non-existent. This photograph shows the appearance of the part some weeks later. (Fig. 5.) Of course this was an altogether exceptional example of nævus. The treatment also was not such as you will very often be able to adopt. But it is a case you will do well to remember. Bear in mind, especially, when you enter upon practice, the exceeding usefulness of pressure as a therapeutic means, for it is in a great variety of circumstances of the greatest usefulness, while it is too apt to be forgotten altogether. I will spare you the recounting of other methods of treating nævus.

FIG. 5.



In addition to these various forms of tumour, peculiar to the fœtal stage of existence, you must bear in mind that almost any other variety of tumour such as we are accustomed to meet with in later life, may also occur congenitally. It is true that such tumours are rare in the fœtus, but there is no intrinsic reason why they may not be found in this association. With these, however, we have at present no concern.

G. A. PILKINGTON, M.R.C.S., L.S.A., Mayor of Southport, has been unanimously elected Liberal candidate for the Southport division by the Executive Committee of the Liberal Association.

ON THE
SPECIFIC ORIGIN OF GENERAL DISEASE.[1]

By J. WALLACE ANDERSON, M.D.,
LECTURER ON MEDICINE, GLASGOW ROYAL INFIRMARY MEDICAL SCHOOL,
ASSISTANT-PHYSICIAN TO THE ROYAL INFIRMARY.

I NEED offer no apology for the subject of the present paper. At the present day it is suggestive enough. At once a whole host of microbes, spores, and other horrid things rise up before us, for in this age there are germs, germs everywhere. They try to win our toleration, if not our sympathy, under the thin garb of a new name; bacilli possibly, little walking-sticks, they call themselves, with quite a wont-you-have-me kind of air. But I am not going to take up the matter lightly. It is a burning question, and one of the greatest interest; the relation between these organisms and disease; and apart from the practical results that may yet follow the subject is not without its attractions as a mere speculative inquiry. It has been left too much in the hands of the pathologists. Surgery has within well-defined limits studied the question, and with an advantage to suffering humanity that few, if any, will gainsay; but when from the wide domain of medicine individual diseases are brought in, and we are told that this and that germ is the only true *fons et origo mali* of each, we may with reason both wonder and doubt. I would still leave to the pathologists the task—a most agreeable one doubtless—of further germ discoveries, believing that there are other views of the question that should readily invite the attention of the medical practitioner. What I have proposed to myself is an abstract inquiry into the essential cause of individual diseases, and what I wish to present to you is the reasonableness of the opinion that many—we can never say how many—diseases are caused by distinct specific germs. Holding this view implies the existence of an opposing force. Now, without going into the old scholastic inquiry as to the nature of health and disease, I suppose it will be admitted that their relation is one of antagonism. Certainly we do act as if we were engaged in a conflict. We endeavour to strengthen the vital forces. We do this by such means as improved sanitary conditions, better food, tonic medicines, or change of air; by keeping up the supplies, so to speak. Again, we do the opposite to the opposing forces. We cut off their supplies by improved hygienic measures: pure air frequently, if possible continually, renewed; attention to cleanliness in all respects. That cuts off the supplies of the invaders. If universally carried out it would lead to the complete extinction of typhus fever, for example. We even go further, and take a lesson from actual warfare by laying waste the fields over which we believe the enemy will march. Do we not do this? do we not willingly submit to the lesser evil, in the expectation of avoiding the greater, when by vaccination we substitute cow-pox for the dangerous and disfiguring small-pox? Practically, then, we act as if we were face to face with foes. But I have often thought that it is on the most general grounds reasonable to suppose that the condition of health is constantly assailed by influences around us. I think we may very properly hold the view that every disease is but a response to an impression of some kind. This law of response seems to be universal in nature. Every act, circumstance, or condition has its response, physical, and, in the case of sentient beings, intellectual as well. It was while reflecting on the nature of fever and its relation to these organisms of contagion, the existence of which I am assuming, that my thoughts went first in this direction. It seemed to me that fever might be viewed as a form of resistance or defence (as a response to an evil necessarily is) against these pernicious influences around us—just as truly as that, in the world of feeling, the flushed countenance, the passion, and it may be the knock-down blow, are the response to the imputation of falsehood. So far as we can judge, this principle is universal, or, as Emerson says, "The law at the foundation of all things is retribution." It will thus be seen from what standpoint I wish to view the origin of disease in this paper. Jonathan Hutchinson, in his lectures on "The Pedigree of Disease," approaches the question from the other side. He dwells on temperament, idiosyncrasy, and diathesis as causes of disease. He does not of course exclude external influences, but holds, or at least inclines to, the opinion that intrinsic conditions rather than extrinsic influences are the determining causes of the endless variety of diseases. But there are two sides to every question, and it is the other I would venture to take and present on this occasion. I am on the side of the germs. My creed is: "The law at the foundation of all things is retribution."

In proceeding further to the consideration of the precise question before us—viz., a specific organism the cause of disease,—I am confronted with the proverbial difficulty of knowing where to draw the line. One has little difficulty with the common infectious fevers, yet many will raise doubts regarding the specific origin of erysipelas and diphtheria; and what shall we say of such diseases as pneumonia, still more of ordinary catarrh? That is where the doubts and the discussion come in. Let us begin with what is pretty well assured—the dependence of each of the common fevers on a specific organised germ. That they are caused by an organism, and not mere inorganic particles, is inferred from the general character of the fevers themselves. They have an incubation, a growth, a maturity, a power of reproduction, a struggle for existence doubtless, a decline and death—the attributes of all living beings. Then it is a matter of common remark that a particular fever reproduces itself and no other. The distinctive characters of each are always preserved. The typhus germ strikes suddenly and vigorously, living on the system as a whole and on no individual part; its death is sudden and on a fairly definite day, and then the sufferer is safe. How different is the germ of enteric fever! Unlike that of typhus, in its immature or larval condition, it is an amphibious creature, most likely taking to the air occasionally, but preferring water, or perhaps rather milk, when it can get it. I say larval state, because from analogy we may infer that it reaches the mature condition in the human body. Once there, it lives longer than the typhus germ, having had a distinctly longer incubation and slower adolescence than its altogether shorter-lived typhus brother. It has its peculiar well-defined local manifestation, and often exhibits that indication of a relapse which is perfected in some of the other fevers. In all these respects it is specifically distinguished from typhus fever. But however interesting the study of the distinctive characters of the common fevers may be, and I think nothing to the physician can be of greater interest, I need not here dwell upon them merely as a proof of what is generally accepted, even were it only accepted truisms I had to offer. I would only ask to be allowed to make an exception in favour of intermittent fever and erysipelas. The ague germ presents some interesting peculiarities. It is essentially an aquatic bird, for though a warm atmosphere invites it, it will not fly far from its home in the marsh. In its fondness for the water it resembles enteric fever, but, unlike the latter, it is in no sense cosmopolitan. But it would seem as if it had another distinctive peculiarity—viz., its size and weight. A belt of trees will catch the germs in its meshes and save the troops beyond, and they are substantial enough to be carried a considerable though still quite limited distance by the wind. Their greater weight may be inferred from the fact that a pretty high temperature is needed to raise their ponderous bodies from their bed, and in no case are they raised to any great height. They have a curious but perhaps not absolutely peculiar affinity for water, as a running stream between is known to be something of a protection to a body of troops on the further side. In all respects the germ presents the most marked contrast to such a one as that of epidemic influenza, which asserts its powers at long intervals, is often pandemic when it does appear, and would seem to be transmissible unimpaired for many miles at least, and solely through the air. Such are some of the best examples I can think of in evidence of specificity.

Now as to erysipelas. I select it as a distinct departure from a class of diseases whose specificity is pretty generally accepted. Perhaps regarding no disease has the question of specificity been more disputed than that of erysipelas, but I do not refer to it to enter upon an enumeration of its special characters, though the subject might be made as interesting as it is ample enough, but rather to call attention to the arguments usually adduced in favour of its non-specificity, because, so far from being conclusive, they rather disclose further the question under consideration. "The arguments in favour of its being a non-specific and local disease," says Bristowe, who summarises them conveniently for us, "are chiefly the following:—First, the fact that the disease appears in many cases to arise from exposure to cold and various other non-specific causes; second, that a previous attack so far from precluding subsequent attacks, as is generally the case with the infectious fevers, encourages them, as is the common rule with the non-specific inflammations; third, that contagiousness is not an attribute of the specific fevers only, for many varieties of simple inflammation (catarrh, ophthalmia, and the like) are apt to spread by contagion."[2] Now the first argument, while qualified by the word "appears," yet to that extent begs the question, for we hold that exposure to cold in the case of erysipelas, as in many other diseases, simply permits the common but still specific germ to gain for the time the mastery over our system. Dr. Francis Henderson is the only one, so far as I know, who boldly advocates that view on abstract grounds. In an able paper on the Rationale of Cold as a Cause of Disease,[3] he maintains the following proposition: "Cold is not of itself adequate to cause these various forms of disease; it is only one of two factors which in ordinary circumstances require to act conjointly. The catarrh, the inflammation, and the fever which are produced by exposure to cold have a real *materies morbi;* but this *materies* could not be the cause of disease if the vital powers of the part or of the system were not abstracted or lowered by the agency of cold." That is the view we have always held. Now, the germ of erysipelas seems to resemble that of ordinary catarrh in respect of its being a very common one, yet acting in its own special ways—amongst others, in taking effect on our system, as some suppose, only through an abraded surface, however minute. As to the second argument, the fact of a disease being taken possibly, or even readily, a second time, is little evidence of its non-specificity. Relapsing fever is a typically specific affection, and one attack is no protection against another. So with regard to intermittent fever; and Maclagan would instance acute rheumatism as another common exception. Then as to contagiousness not being an attribute of the specific fevers alone, we simply say it is an attribute of specific diseases alone, for it need not be a fever, and catarrh is one of the commonest illustrations of this. It may be thought I am hurrying past many difficulties, but these will come up again under the heading of objections.

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[1] Read before the Glasgow Medico-Chirurgical Society.

But now we come to the difficulty of knowing where to draw the line. What can we say of such diseases as pneumonia, asthma, dysentery, or any other malady taken at random?—although these I have really selected, as we shall see immediately. It is with such diseases that the real difficulty begins in our present state of knowledge, and all that we can hope to do is possibly to suggest some points for further reflection. Well, I think we sometimes create a difficulty by forgetting that symptoms which present a general similarity may indicate very different diseases. We can imagine an ignorant person including an eczema, an erysipelas, and a slight burn under the term inflammation of the skin, or grouping together as one disease enteric fever, dysentery, and simple diarrhœa; and we can suppose a much less ignorant person considering a bronchial spasm due to bronchitis to be the same thing as pure idiopathic asthma; and so on. If it be not admitted that either bronchitis or bronchial spasm is due to a specific cause, and I do not say so myself, it will be allowed that the very same symptom, the asthma, may in some people be the result of a specific factor—e.g., the pollen of hay. Those who believe that there is such a thing as hay asthma will admit that it is a specific complaint. It seems to me, indeed, that the term asthma is as comprehensive and as vague as that of dropsy. And may it not be as vain to ask if pneumonia is a specific affection? May there not be really different diseases included under that term, some specific and others non-specific? Some think a fractured rib can cause a pneumonia. Can that possibly be the same disease as ordinary idiopathic pneumonia, or still more the exceptional epidemic forms? Just as one would expect, the report on pneumonia recently issued by the Investigation Committee of the British Medical Association shows that some kind of division of this term is necessary if we are to make anything of it at all. Without passing any opinion on the classification given by that committee, it seems clear enough from their report that, besides certain forms of pneumonia which are apparently set up by various non-specific influences, there are others of a strictly epidemic character, falling on a district and spreading thence so widely and so inexplicably as to imply a generally prevailing yet special cause. Examples, too, are given which appear to prove conclusively the infectious nature of certain forms. And so with regard to dysentery. Many cases presenting symptoms which lead us to diagnose that disease may no doubt be the result of non-specific causes; but I think few can doubt that the epidemic form handed down through ages with a constant history, and of such exceptional severity, must be the result of a fixed specific cause.

Further than this I shall not attempt to go. We have, indeed, touched but the border-land of disease as a whole in regard to specificity; but beyond we could only wander in vain imaginings. But, possibly, not the least interesting part of the question lies in the consideration of the objections that may be urged against even the position I have now taken. And this will form the second and shorter part of our subject. In the first place, it may be said that the infecting particles of even a specific fever are not organisms at all; it may be held that they are inorganic. I need not dwell upon this objection; for I find that Maclagan many years ago discussed this point very elaborately in his work on "The Germ Theory of Disease." After all, the one essential distinction is that a number of living germs merely sufficient for successful development is all that is needed to secure the maximum effect; whereas the effect of inorganic or lifeless particles is always commensurate with their numbers or amount. The power of infection, too, as distinguished from contagion, is, I should imagine, the prerogative of a living germ; but that may be disputed; the former cannot be, and its bearing on our subject is obvious. Inorganic particles cannot, properly speaking, have an incubation; they do not mature, nor can they reproduce their kind.

To return to the question of specificity. Though we do not venture to affirm that this and that disease are of specific origin, it may occur to some of us that very many diseases are so. We find that not only is ordinary catarrh epidemic and infectious, but in particular seasons we have special varieties of it—say in the form chiefly of a myalgia. Now, one may ask himself if such special forms may not depend on a special form of the catarrhal germ? The supposition is fantastic enough, but I make it for that very reason. It forces us to ask if we are to suppose a germ for everything—for a kick on the shins, perhaps. Simply letting the last remark pass, I would say, first of all, that the specificity of practically an endless number of diseases is not to be considered unlikely on the ground of the limited resources of nature. The variety that nature presents in the visible world is endless, and everything tends to show that the same variety obtains in what is, to our unaided eye, the unseen world. No doubt one instinctively refuses to believe that there is a germ for diphtheria, and for erysipelas, and for pneumonia, and at first may think it simply ludicrous to imagine that common catarrh can depend on a specific germ. It is too quixotic to suppose we are fighting daily with germs and microbes—not indeed by the day, but at every turn we take and every breath we breathe. But I say we are not to consider the position untenable from any limit to variety in nature. Is it not practically infinite? The variety in the vegetable kingdom strikes the dullest, and the learned can divide and classify into groups innumerable the vast array of form and kind; but the work is never done. In moss, and heath, and fern, and such-like meaner things for so we reckon them who know little of them the earnest student finds a continual feast; and amongst the lichens, that almost look like a part of the rock from which they seem to draw their scanty store of life, there are curious secrets hidden, of which even a Leighton or a Stirton has never dreamed. Well, then, one may admit the possibility of a more substantive disease having a specific origin, but refuse to believe that such a vulgar thing as common cold can lay claim to any kind of descent. But is the contrast greater or nearly so great as many which we find in the visible world? Is the contrast between common catarrh and cerebro-spinal fever greater than between the grass that clothes our fields or the weeds that infest our path, and that rare fern that is only found in one shady glen, or the lichen that still lingers, the last of its race, on but one mountain side? It is not half so great. Catarrh is the common chickweed; cerebro-spinal fever the rarer plant that we only meet with now and then. Common plants will grow anywhere—that is why they are common; but rarer plants are of special soils. Anyone will take a common cold, but special cultivation, so to speak, is needed to make anyone take an erysipelas, though in the few it will grow apace. This reference to special soils reminds us of the undoubted fact that some are much more prone to the contagious fevers than others. Occasionally we meet with a person who has had scarlet fever repeatedly, and this exceptional liability we sometimes find is not an individual peculiarity merely, but one that may affect a whole family. I am as firmly convinced, on the other hand, that other individuals and other families present a specially unfavourable nidus for the development of a particular germ. And here too the question of heredity might be discussed, were it not quite understood now that by that expression one only means, where an external morbific influence can be assumed at all, an inherited peculiarity of constitution that is specially favourable to a particular spore. And, lastly, I can suppose this objection still urged: In the natural world there are doubtless many rare plants and animals too, as well as those which are very common; but they all exist somewhere. They do not disappear and return every other year or half century perhaps, as some epidemic diseases do. Or, without looking for analogies at all, one may say, "I will not believe that a malady like true epidemic influenza, which we only see a few times in a century, arises under the same conditions as those diseases which are always with us; it is absurd to suppose that these varied diseases we have been considering originate under one common law." Well, I am not going to prove that the germ of true epidemic influenza or of relapsing fever is always about us, but in an immature state. I do not think we shall get much further in that direction than did Sydenham, when by "epidemic constitution" he meant or supposed a peculiar atmospheric state by which such exacerbations of disease were brought about. But I think we have analogous excesses in the visible world. Those of us who have lived in the country have observed how special years have been marked by special flowering seasons; when the apple-blossom decked every garden, or the primrose covered every grove and meadow. One year the poor man gets his potato cheaper; another will make the rich man pay willingly for the finer wine. In the animal world we have special years of migratory visitants which defy the naturalist to explain. One may see in all this the law of variation which is universal in nature, but we cannot explain the phenomena themselves. I do not think such reflections are idle. They have made me cease to wonder at such an occurrence as a sporadic case of enteric fever. I am no believer in its spontaneous origin. Its germs are likely ever present, but either themselves immature or waiting for a convenient pabulum. And once a centre formed, the extension is a matter of no difficulty. But I must not be tempted to go beyond our present subject. The origin of disease has many sides, and I have only presented one in this paper. It has long been a hobby of mine, and took its origin certainly quite apart from the germ discoveries in medical disease of the last year or two. Of these bodies which the pathologist shows us I know nothing. One may be a whole cityful of germs, or no germ at all. Other views of the question seem to me to have been too much neglected, and one of these I have done my best to offer in the foregoing remarks.

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[2] Theory and Practice of Medicine, 5th ed., pp. [illegible].

[3] Glasg. Med. Journ., Oct. 1881.

FURTHER OBSERVATIONS ON THE CURE OF WRITER'S CRAMP.

BY A. DE WATTEVILLE, M.A., M.D., B.Sc.,
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THERE are two phases in the early history of every scientific discovery or new application of practical methods. Its truth or value is at first denied; then, jealousy springing up, the originality of the discovery or invention is placed to the credit of others. When a principle only is involved, the claim is sometimes made for the dead; at other times, however, especially when practical issues are bound up with the question, the attempt is made for the benefit of the living. I had the opportunity a short time ago[1] of describing the remarkable results obtained by Mr. Wolff, of 19, Upper Berkeley-street, London, in the treatment of writer's cramp by a combined application of massage, gymnastics, and caligraphic exercises. The same occurrence which had signalised his first appearance in Germany some years ago saluted his introduction to the profession in this country. It was asserted that his method contained nothing new, that massage was known to the Greeks, and that Swedish gymnastics are as old as the century. Now I did not claim for Mr. Wolff anything but that he alone, among those who devoted themselves to the treatment of writer's cramp, had been generally, nay, almost regularly, successful in his endeavours. I have in vain looked through literature for similar results; and I am glad to find that in the last works which the medical press has given us on mechanico-therapeutics[2] the authors refer to the subject in terms which fully confirm these conclusions. In order to illustrate the value of Mr. Wolff's method I publish two cases, which will speak for themselves. No commentary is needed in presence of facts so clear and so telling.

CASE 1.—Mr. G. H——, a merchant of Liverpool, with no noteworthy family history or personal antecedents, noticed seventeen years ago a weakness in the thumb, index and middle fingers, and a tendency of the arm to turn inwards, when he was writing. These symptoms steadily grew worse up to 1874, when pains began to be experienced, extending from the wrist to the elbow along the ulnar side of the arm. He persisted in his attempts to write, however, and these brought on spasmodic movements and pains in the upper arm, whilst, strange to say, the motor and sensory troubles in the arm and wrist rather showed a tendency to mitigation, being then replaced by tremors. For the last four years the use of the pen has been practically impossible, and the patient exclusively used the type-writer for his correspondence. The use of this instrument rather increased the tremors when attempts were made to write, whilst it developed sensations of pain in the fingers. I first saw Mr. G. H—— in 1883, and again on the 16th of January, 1885, when he came to London at my instance, to place himself in the hands of Mr. Wolff. Several specimens of his handwriting were taken. (See facsimiles.) It took him seven minutes to trace four or five very short lines of very shaky characters. The facsimile bearing the date Jan. 16th was taken just before the first manipulation; the others will tell their own tale. The improvement was steady, and on the 30th of the same month (January) he left London to return to his business in Liverpool. He was then able to write without difficulty for several hours a day. I need hardly say that the ordinary resources of therapeutics, including a rest of several months on board ship, had been in vain resorted to before recourse had been had to Mr. Wolff's method. In fact, so despondent was the patient as to the possibility of a cure, that I had no small difficulty in persuading him to make another attempt to obtain relief from his apparently hopeless malady.

CASE 2.—Mrs. C. K—— came to Mr. Wolff for treatment. The case being a well marked one, I obtained permission to watch it for my own instruction. The patient's power to write was tested at intervals of three or four days, from January 14th to February 18th, 1885, on which latter date she considered herself as cured. (See series of facsimiles.) I append a few notes concerning this patient. Her age was forty-three, and the first symptoms of her complaint date from 1871. She then experienced a mere feeling of fatigue and discomfort in the arm on writing. Till 1875 no change was noticed except an increasing powerlessness; though she tried to write a little, this became so accentuated that she had to give up almost every attempt. She rested for some years, during which the feelings, which had in the meanwhile assumed the character of pain, persisted, and even extended upwards to the shoulder. Tremors in both arms made their appearance, occurring first on performing other actions than writing (combing the hair, &c.), and finally persisting for the whole day. No treatment seemed to give her any relief. When I saw her the act of writing was almost impossible; it took her five minutes of effort and pain to trace eight or ten very shaky letters. As the treatment proceeded the symptoms gradually subsided. On the 6th the persistent feeling of pain in the arm had disappeared. She could then write for a few minutes. The motor symptoms gave way also, as is well shown by the series of facsimiles. The specimen taken on the 9th February coincided

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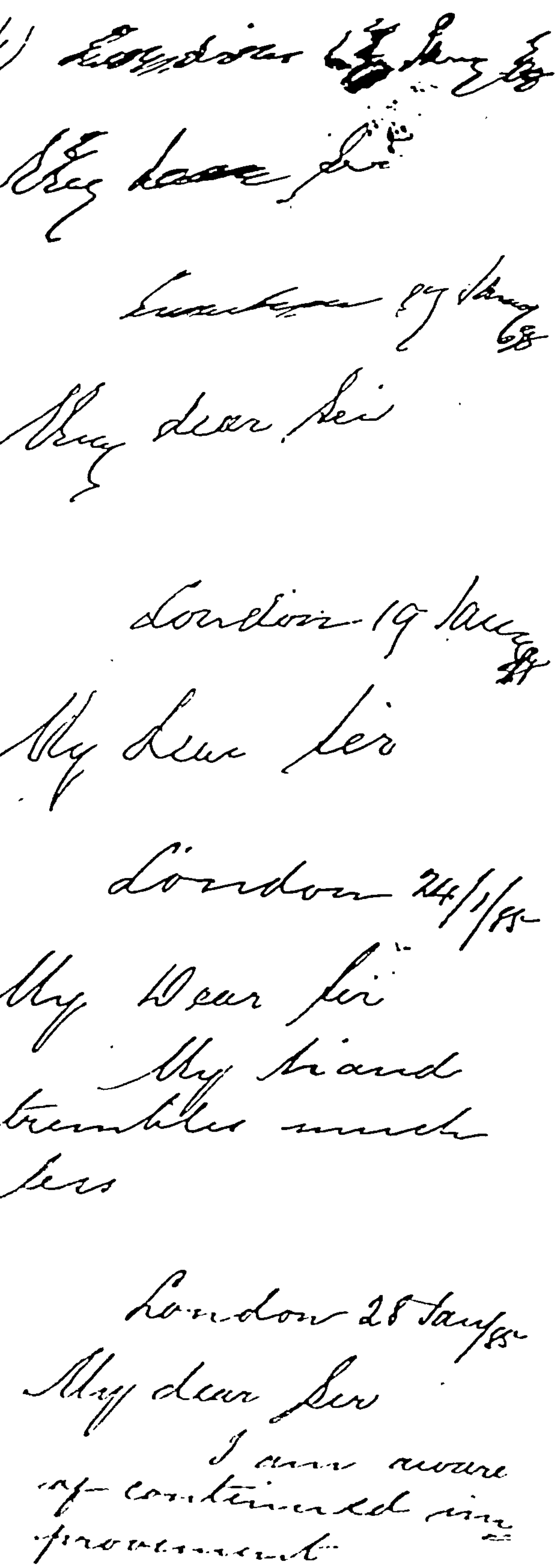
[1] ritish Medical Journal, Feb. 14th, 1885.

[2] Reibmayr: Die Massage, and Die Technik der Massage (Vienna, 1884). Graham: On Massage (New York, 1884).

FACSIMILES OF WRITING, CASE 1.



London [illegible] Jany 85
My dear Sir

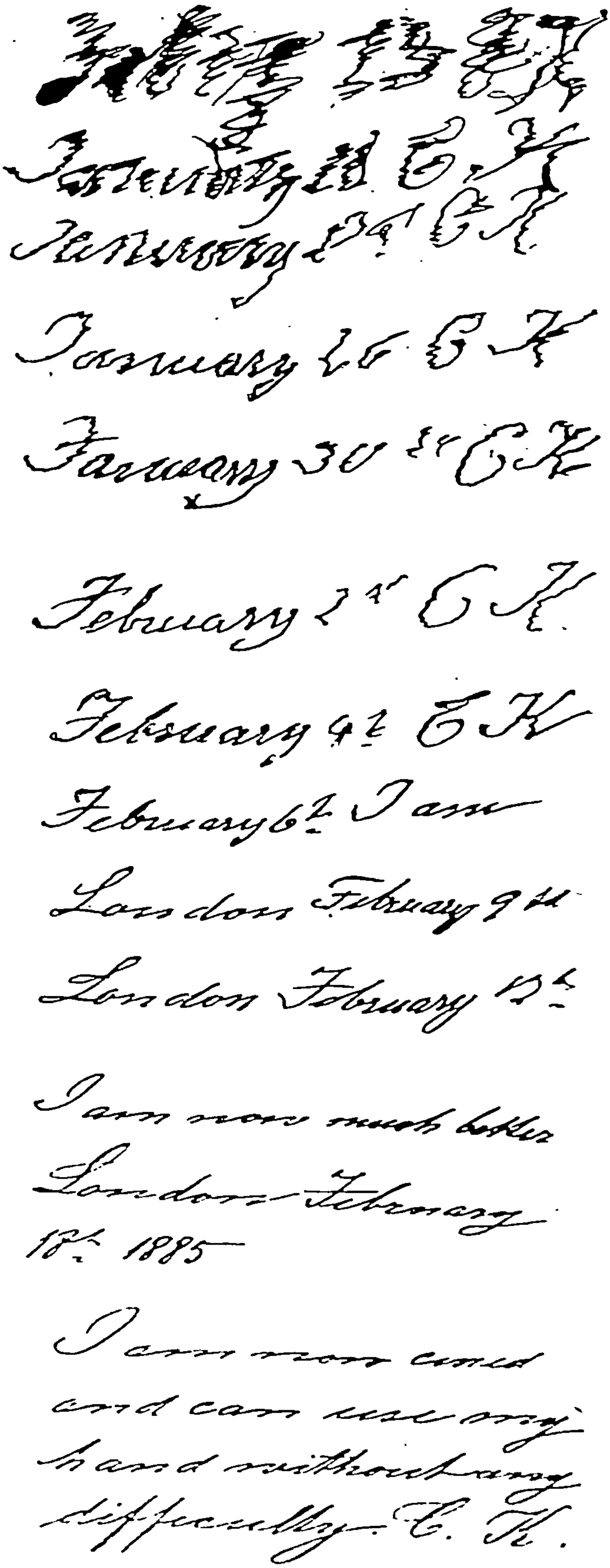
London 17 Jany 85
My dear Sir

London 19 Jany 85
My Dear Sir

London 24/1/85
My Dear Sir
My hand
trembles much
less

London 28 Jan/85
My dear Sir
I am aware
of continued im-
provement

FACSIMILES OF WRITING, CASE 2.



[illegible]
January 21 E K
January 23rd E K
January 26 E K
January 30th E K
February 2d E K.
February 4th E K
February 6th I am
London February 9th
London February 12th
I am now much better
London February
18th 1885
I am now cured
and can use my
hand without any
difficulty. E. K.

with a menstrual period, and shows an accidental increase of the tremor.

A general idea of Mr. Wolff's plan of procedure will be gained by a perusal of the article already referred to, or of the paragraph I have devoted to it in the "Year-book of Treatment," recently published by Messrs. Cassell and Co. I need only repeat here what I have previously said—viz., that there is no secret connected with it. Personal dexterity and the experience of many years' assiduous observation and practice are the elements of Mr. Wolff's success.

Welbeck-street, W.

ON THE

NON-MALIGNANT TUMOURS OF THE SPERMATIC CORD, AND THEIR DIAGNOSIS FROM HERNIA.[1]

BY EBEN. WATSON, M.A., M.D.,
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I DO not intend, in this paper, to enter at all upon the literature of my subject, but merely remark that it is wonderfully scanty, and what there is of it is not quite of such a kind as to solve many of the doubts and difficulties which surround this class of cases. It may, however, be well to recall the fact that the diagnosis of tumours of the cord, both as to their exact nature and as to their differentiation from hernia, has been found by the best and most experienced surgeons so difficult as sometimes to have been declared by them impossible without cutting down upon the tumour, which is often by no means desirable from the patient's point of view. I have therefore thought that if practical surgeons would more frequently put on record a minute and accurate account of such cases of this kind as were presented to them, the sum total of their observations would lead to a better understanding of what is at present rather a surgical puzzle. I know, and feel very much, in commencing this paper, that the very doubtfulness of many of these cases, and the imperfect or unreliable histories which operating surgeons too often obtain of their early progress, combine to make it very difficult to write about them as one would wish to do; yet that difficulty is the very reason why such an attempt ought to be made, and the very foundation of the appeal which I should like to make to all clinical surgeons to institute more careful observations in these cases, and to record the results more frequently than hitherto. The present paper is intended as a contribution in this direction towards the elucidation of what I venture to call one of the most difficult chapters in surgery.

For practical purposes the simple or non-malignant tumours of the spermatic cord may be divided into the fluid and the solid, the former being, on the whole, the more frequent of the two. They consist of œdema of the cord and the so-called hydroceles of that organ. It must be remembered that the areolar tissue, which supports the elements of the cord, is continuous with a very considerable amount of the same tissue in the pelvis—viz., that which connects the transversalis fascia with the peritoneum; so that when œdema occurs in the cord, it may pass up or be pressed up within the inguinal canal and into the same structure within the pelvis. Thus it may be made altogether to disappear from the swelling in the cord, and lead to the idea that the case is one of hernia, unless the special features of the pathological condition are attended to. These will best be shown in an example.

On May 3rd, 1884, a patient, aged seventeen, was admitted to one of my wards in the Royal Infirmary. He stated that he had had what he believed to be a rupture for some six years. It had at first appeared suddenly as a swelling in the right groin, and when he consulted his doctor he confirmed his opinion of its nature. The swelling was soft, and extended a little way into the scrotum. It was readily reducible on pressure, but on lying down it did not disappear till pressed on by the hand. By the advice of his doctor he wore for eighteen months a truss, which kept it up very well; but the truss got broken, and he did not buy another, so that the swelling remained down in the groin and scrotum. He does not seem to have attempted to reduce it after he gave up wearing the truss. One morning, however, about a fortnight before admission into the infirmary, he awoke with a feeling of constriction at the upper part of the abdomen, and pain in the right groin, especially on coughing. He then noticed that the swelling was much larger than usual, harder, and that it extended to the lowest part of the scrotum. He then tried to reduce the supposed hernia, but failed; and he therefore applied for advice at the dispensary of Anderson's College, where he was advised to go to the infirmary. On admission there was found the swelling as above described, involving the right testicle, and extending up into the inguinal canal. It was tense and elastic, with a softer part in front, and rather to the inner side of the swelling. The skin over the tumour at the lowest part was red, and there was no distinct impulse given to it on coughing. There was no sickness, and the bowels were easily opened by castor oil. Fomentations were applied, and in a day or two fluctuation could be detected at the lower part of the tumour, a little above and in front of the testicle. An incision was at once made into this part, and a considerable quantity of pus evacuated. The director was then passed up into the inguinal canal, and another opening made in the upper part of the abscess. A small drainage-tube was pulled through the openings, and the usual antiseptic dressings were applied. Some purulent discharge continued for a few days, but it soon diminished so much as to allow the tube to be withdrawn, and the boy left the hospital quite cured in about three weeks from his admission.

I have no doubt that this was a case of slow œdema of the areolar tissue of the cord, which ultimately became acute and ended in suppuration. For the early part of the history we have only the patient's statement to rely upon, but it may, I think, be received as accurate so far as it goes. The swelling appeared first in the groin, occurring without known cause, and slowly progressing downwards into the scrotum. It could be reduced, or at all events diminished, by pressure with the hand, but always reappeared when the pressure was taken off. We are left in doubt as to the completeness or incompleteness of this reduction, and also as to the effect on the tumour of forcing a cough at this time. Afterwards, when I saw him, there was no such impulse on coughing as there would be in a case of hernia, and there was no diminution of the swelling in any posture or by gentle pressure. I regret that it is not stated in my notes what interval of time elapsed between his giving up the use of the truss and the occurrence of the acute inflammation, but one can easily understand that the pressure of a truss in this case might cause irritation and bring on such an attack. It therefore seems to me a good illustration of the evil which may follow from the too often routine practice of ordering a truss for every swelling, even if only partially reducible, which may occur in the position of an inguinal hernia.

Hydrocele of the cord may originate in the same way—viz., by œdema, not resulting in suppuration, but in the expansion of one or more of the areolar spaces containing fluid. It perhaps, however, more frequently originates in some small extravasation of blood, which after partial coagulation changes into a serous cyst. In either case, the diagnosis is comparatively easy if the tumour can be isolated and the cord felt above and below it; but this is not always possible, as the hydrocele may be partly included in the inguinal canal. Nay, it is possible that in some rare cases the fluid may pass up into the abdomen of the patient and entirely disappear in the recumbent position. This occurrence has been explained by some writers as due to the non-obliteration of the "processus funicularis" of the peritoneum; but I think it may also be accounted for by the occurrence of two areolar cavities containing fluid as the result of œdema, one cavity being in the pelvis and the other in the cord. But this is mere speculation on my part, for I have not seen any such case, even in the infant, though I have treated a goodly number of them for hydrocele. In no case have I been able to press back the fluid above the internal inguinal opening.

In the cases of hydrocele of the cord which I have examined, there was little or no diminution of the tumour on the patient's lying down, and the impulse on coughing has appeared to me slight compared with that felt in a case of hernia. For example, about a year and a half ago an American gentleman consulted me for a tumour of the cord which had existed for several months. He had a hernia on the right side, for which he wore a truss, and on the left side a long oval- or pear-shaped tumour, the narrow part of which was included in the inguinal canal and the larger part extended downwards towards the scrotum. The cord could be felt below but not above it. The impulse on coughing was slight, and it did not disappear, though it diminished and softened in the recumbent position. It was translucent and free from pain. His general health was quite good, but the swelling had been slowly increasing for several weeks. The nature of the tumour had been rightly diagnosed some time previously by a surgeon in London, who had drawn off the fluid, and therefore it was the more readily punctured by me with an aspirating needle, when some ounces of clear serous fluid were withdrawn. The cord was then felt clearly, and there was no evidence of hernial protrusion.

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[1] Read before the Medico-Chirurgical Society of Glasgow, April 3rd, 1885.

But sometimes the matter is not quite so easily cleared up—as, for instance, in the case of a man who was brought to the Royal Infirmary from the country with all the symptoms of strangulated inguinal hernia. He had worn a truss for years when these symptoms arose, and on admission I found a much larger tumour than in the previous case, involving great part of the cord, but still not extending into the scrotum. There was at that time no impulse on coughing, and the tumour was pear-shaped, the neck of it being in the inguinal canal. It was quite smooth and too tense to be distinctly fluctuant, yet it gave to the fingers the feeling of fluid more than of solid contents, but it was not translucent. Nevertheless, I believed it was not a hernia, but a hydrocele of the cord, and I said so to the students and others around me at the time. I also gave it, however, as my opinion that in all the circumstances of the case the best practice was to cut down on it and incise it, which I thereupon did. There was no hernia, but a considerable quantity of reddish serum. The wound healed readily, and the man left the hospital radically cured of the hydrocele and relieved from the fear of hernia, of which he had no trace. Of course the constipation and sickness had easily yielded to proper treatment of a very simple kind.

I have little doubt that this last case was an example of the origin of hydrocele of the cord in a blood-cyst from the patient being a working man and in the prime of life, and also from the serum being still coloured with hæmatin when evacuated. The other case, being that of a gentleman in easy circumstances and of pretty advanced age, was, I think, an example of the origin of this affection in œdema of the cord, or possibly in a partially unobliterated funis. Of course, as I told him, if the fluid was found to reaccumulate rapidly and to be a trouble to him, he might require to have it injected with tincture of iodine and radically cured; but this could not be thought of while he was merely travelling, as he then was, in this country.

(To be concluded.)

A CONSTANT ANTISEPTIC VAPOUR DRESSING.

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SINCE Schultz first proposed the employment of the oil of eucalyptus in surgery numerous cases showing its value as an antiseptic have been published (e.g., by Siegen, in *Deutsche Medicinische Wochenschrift*, 1880, No. 30, and 1881, No. 14; and by Busch, in *Berliner Klinische Wochenschrift*, 1880, No. 39). For an antiseptic spray, the oil can be utilised by either filling the spray bottle with the pure undiluted oil or by employing a solution in rectified spirit (1 in 8). The first method, however, produces a spray which is so powerful as to make it almost intolerable for some nurses. Inhalation of the strongly irritating eucalyptus steam, when it is at all prolonged, is not very pleasant. It often occurs that one desires the constant action of a volatile antiseptic on a wound which is already, to a greater or less extent, septic. Syringing in such a case would do harm by breaking up union which has already taken place in part, and even were it possible to syringe out a wound with corrosive sublimate or some other antiseptic solution, without at the same time causing any disturbance to the healing process, the solution would not perhaps penetrate to all corners and recesses where an antiseptic vapour, constantly applied and renewed, would find its way. In cases of this nature, which I may best illustrate by the subjoined notes of one or two recently under treatment in the Bury Dispensary Hospital, the great value of antiseptic agents which volatilise at the temperature of the body is seen. A dressing which throws a constant antiseptic steam into the wound can be prepared. Plain ordinary gauze, unimpregnated with any other antiseptic material, can be kept (till required for use) soaking in pure eucalyptus oil. Before being put on the wound which is to be dressed, strips of this eucalyptus gauze are squeezed as dry as possible and then steeped in eucalyptus and olive oil (1 in 5). Thus prepared, the strips of gauze are put on the wound, and immediately over them are applied some folds of ordinary absorbent cotton-wool, which have been freshly wrung out of the pure eucalyptus oil. The thickness of this dressing can be made to vary with the amount of discharge expected from the wound, and, if thought necessary, some dry antiseptic absorbent dressing material can be put outside this moist eucalyptus dressing. The wool, impregnated with eucalyptus, however, very soon dries at the temperature of the body, and its power as an absorbing dressing is higher than one would at first suppose. The deep dressing may be as above described, or may consist of gauze strips steeped in a solution of eucalyptus oil in rectified spirit (1 in 8). In twenty cases treated in Professor Busch's wards (Bonn), the pure undiluted oil was applied directly on wounded surfaces without causing the least pain, even in children.

CASE 1.—P. H——, aged four, was admitted into hospital on Nov. 12th, with injury to the left hand. There was a large open wound parallel to the fifth metacarpal bone, a wound also on the dorsum of the hand between the thumb and index finger, and a compound fracture of two metacarpal bones. After the wounds had been stitched and syringed out with corrosive sublimate, a sublimated dressing was applied. In the evening of Nov. 15th this dressing was saturated with discharge, and the wound, when examined, was found not to be aseptic. Frequently repeated changes of dressing and syringing with corrosive sublimate failed to make it sweet. On Jan. 3rd there was still a good deal of discharge, which smelt very offensively. The eucalyptus dressing, as above described, was applied and left *in situ* for a fortnight. On Jan. 17th the eucalyptus dressing was removed. The odour of the eucalyptus was still distinctly perceptible in the absorbent cotton, which was of a yellow colour and quite dry. The wound was found to be nearly healed up, and there was no bad smell.

CASE 2.—E. O——, male, aged forty-two, was admitted on Dec. 15th, having received an injury to his foot by a heavy weight falling on the dorsum. The first metatarsal bone was fractured (compound), and the metatarso-phalangeal joint was open. The open joint and the entire wound were well syringed out with corrosive sublimate solution. The edges of the wound were brought together by antiseptic stitches, and a dressing of absorbent cotton, steeped in pure eucalyptus oil, was applied. All this was done under a eucalyptus spray obtained from pure eucalyptus oil in the spray bottle. The dressing was left on for twenty-two days. During all this period the odour of the eucalyptus was distinctly perceptible at the patient's bedside. There was no elevation of temperature above the normal at any time. On the twenty-third day the dressing was removed. A small amount of blood and discharge was contained in the deeper layers of the wool, but there was no wounded surface, not even a single granulation left. A firm, healthy, pinkish-coloured cicatrix, outside which the ends of the catgut sutures were lying loose, existed where the wound had been. The joint was somewhat stiff. The patient was soon afterwards discharged cured.

CASES 3 and 4 were severe scalds. The one case was that of an adult male who had both feet extensively injured by a kettle of boiling water having been upset on them. The other was that of a girl eight years old. This patient had met with a similar accident, which had caused serious scalds of both arms and of the face. Both cases were septic when admitted, and in both a single application of the eucalyptus dressing at once corrected the disgusting fetor. The dressings were left on for five days. At the end of that period healthy granulating surfaces were exposed when the dressing was removed, and the wool still smelt strongly of eucalyptus. The cases then progressed fast towards recovery, and the remarkable power possessed by a eucalyptus dressing of promoting the rapid formation of healthy granulations, and at the same time causing processes of firm cicatrical tissue to spread inwards quickly from the margin of the wounded surface, was beautifully demonstrated in the course of both of them.

CASE 5.—On Jan. 9th I performed excision of the hip for disease of that joint in a boy aged four. Sero-sublimate gauze dressing was applied, but had to be removed on Jan. 16th, for the discharge had soaked through the dressing, and two long sinuses, which communicated with the wound, were found discharging a septic pus, although at the time of the operation they had been scraped and syringed out with corrosive sublimate solution (1 in 1000) and then plugged with sero-sublimate gauze. The patient's temperature also had risen on the night of the 15th. On Jan. 16th, with eucalyptus spray playing on the wound, after the strips of gauze had been removed and the sinuses well syringed out with corrosive sublimate solution, the eucalyptus dressing as above described was applied. Next day the patient's temperature was normal, and for more than a week afterwards the odour of the eucalpytus was strongly marked all round the bed, the patient's temperature remaining normal.

Bury.

WHEAT-MEAL BREAD; ITS ALIMENTARY VALUE COMPARED WITH THAT OF WHITE FLOUR BREAD.

By DR. CAMPBELL MORFIT, F.I.C., F.C.S.

THERE is such a diversity of chemical opinion as respects the nourishing potentiality of wheat-meal breads, that a satisfactory solution of the question by chemical analysis alone would seem to be difficult, for the present at least. But if we leave the chemists disputing among themselves, and pass from the domain of speculative philosophy on to the safer ground of practical science, mystification is seen to clear away at once, and there is revealed to us by the logic of facts the true state of the case, which I will now endeavour to explain.

Whole wheat-meal bread was the kind upon which the Roman army fed in the time of Julius Cæsar; and in the earlier part of this century Dr. Sylvester Graham, of New England, recommended its use in the United States, where it is now known as Graham bread, and is highly appreciated by bread consumers generally. But until I made the process for the granular form of wheat meal and gave it to the London Bread Reform League, whole meal was coarsely ground and contained its bran as dense flattened scales with sharp points and rough edges, which rendered it irritable to digestive organs the least sensitive. My improvement, which removed these defects entirely, secured for the granular meal a widespread popular favour that has not become universal only because the millers and bakers, failing to understand the philosophy of its manufacture, allow both it and its bread to degenerate into irregularities. Granular wheat meal, unlike the ordinary whole meal, not only makes more toothsome breads, but ensures the maximum degree of assimilation, because it is without that mechanically stimulating effect which hurries the whole meal through the alimentary duct before it has had time to yield all its nourishing matter to absorption. Whatever small portion may be excreted has yet acted an essential part in the process of digestion at least, though we may not be able to define it at present.

There are chemists who encourage a wasteful mode of milling by repudiating the long-accepted doctrine as respects the physiological relations of the nitrogenous compounds of wheat. Their scientific contention not only splits the nitrogenous matter of food substances into divers phases with differential properties, but apportions to each a differential estimate of its nourishing capabilities. One of their tenets in this connexion is that, however much nitrogenous matter may be present, only that portion of it distinguished by them as albuminoid, and which exists as protein (the basis of albumen, casein, fibrin, and the like), is potential for the nourishment of mankind. Indeed, some go so far as to suggest that even a part of the albuminoid nitrogen is of doubtful efficiency in that respect; and dividing the nitrogenous matter into two phases, one coagulable by acids and the other not, they throw out the latter as unavailable food matter. Its proportion may and does vary so widely in the same kind of food as to amount to as little as 5 per cent. in some samples of wheat, and rises to 34 per cent. in others; but these great discrepancies do not affect their judgment in the least. By this social arrangement in chemistry they ostracise nüclein, plastin, and their congeners, as dietetic pariahs; and in the case of wheat, they would relegate to the cattle food bin all of the branny portion which, though representing about a fifth of the total nitrogen of the grain, contains most of it in other phases than the albuminoid—notwithstanding, too, that it carries with it most of the fat and phosphates, and the whole of the cerealine, the digestive ferment natural to the grain.

But while convinced by recent experiences that every part of the wheat grain is food for mankind, I know also that a portion of the branny integument, amounting to 6 per cent. of the whole grain, detracts from the toothsomeness of the baked loaf. Practically, therefore, this tough husky modicum is objectionable in a bread sense, and decortication does not remove it, nor can it be separated from the meal when the wheat grain has been ground in a steel mill. My old process conceded to the Bread Reform League, consequently, must be discarded, because it involves both decortication and the use of steel mills. I now not only make the elimination of the tough bran an incident of the grinding operation, and save any outlay for the purpose, but simultaneously render the tender portion yet more loose and soft in texture, and consequently am able to produce at the minimum of waste and cost, firstly, a standard granular meal of refined character, representing from 93 to 94 per cent. of the cleaned grain, and always uniform in quality and features; and, secondly, a pearl-white meal representing all the farina of the grain with some cerealine, or about 83 per cent. of the whole, and affording a superior material for a white loaf to excel the "household" bread of the bakers. The perfection of these meals facilitated my subsequent improvements in bread-making, and the two combined not only accomplish a saving of 10 to 15 per cent. in the milling operations, but will supply standard meals and breads at less cost than usual.

As yet the public have not had the opportunity for testing the great advantages of genuine wheat-meal breads, because bakers in this country are unable or unwilling to make them properly, and millers do not supply suitable meals. Wheat-meal bread as it should be is attractive in appearance, and very unlike the poor stuff sold as such in the London shops. Whether made by fermentation or without, its basis is granular meal free from any of the usual admixtures or substitutes of white dough or dusted bran and white flour. Its crust is tender and smoothly granular, instead of being rough and hard, and, in the case of fermentation breads, deliciously crisp. The crumb, vesiculated, light, and elastic, is never sodden or too close, becomes stale slowly, has a rich mealy taste, and when chewed excites the salivary secretion. The bran particles are invisible to the eye, even through a magnifying-glass, and, save that they impart an agreeable taste, scarcely betray their presence to the tongue. The outward features and inherent qualities of the breads of my system are characteristic and uniformly the same. Not only are they appetising, but, weight for weight, much more nourishing than white flour breads.

In realising this standard excellence for meals and breads I employ only the usual means, but manage them in unusual ways so as to produce new and important effects. Success is obtained in my system of procedure, not by adopting the dogmas of those chemists whose culte is the aristocratic albuminoids, but by practising a rational philosophy of conflict with them. I act upon my belief that each food substance carries, naturally, an adjuvant of digestive ferments peculiar to itself, as wheat bears cerealine, and which, when loosened from its bonds by compatible means, receives the impulse to co-operate in preparing its associate constituents for digestibility in the human stomach. The observance of this principle has enabled me to convert even milk into a cheese of characteristic toothsomeness and digestibility, chiefly because the latter reclaims and embodies the wealth of essentials now run to waste in the whey. Even my pearl meal, therefore, is made to retain as much as possible of the cerealine matter of the wheat; and when either it or the granular meal is mixed into dough, water is made to set free the digestive ferment for action. This done, the dough, without being touched with the hands, is partitioned in a manner to protect it against injurious influences or changes during fermentation in any weather, and to ensure its perfect cooking in the oven without risk of spoiling a loaf by scorching or otherwise. The water is confined within the loaf until it has co-operated with the cerealine in developing the digestibility of the dough, and in promoting the baking or rather cooking of it into perfect bread; so that the portion necessary for its constitution remains in the loaf as a fixture, the excess passing off only when it has done its part in the cooking.

The crumb and crust of the breads made by my system contradict impressively the arguments against whole wheat meal. But chemical analysis obtains so little interpreting assistance from physiological research in the premises, that it occurred to me to seek a fuller understanding of the subject in a way quite different from any hitherto conceived. That is, having satisfied myself, by oft-repeated practical experiments, that standard breads in every respect can be made with wheat meals, I contrived a method which, though not strictly classical, is one of practical science, for determining what modifications their material undergoes during conversion into bread to render them characteristically superior to any others of the kind. Four different typical wheats (two white and two red) having been selected and first made into three meals—viz., one crude, representing the entire grain; another, the standard granular of my system; and a third, the pearl meal or *farina conels*, also of my system, both of which have been already described,—these meals were then converted severally, and according to my system, into non-ferment and fermentation breads. Scrupulous exactitude was observed as to all the weighings, dryings, and other manipulations, in order to make the results as trustworthy as possible. The first step was to ascertain the exact proportion of total branny matter in the several meals; and for this purpose a given weight of each was carefully but thoroughly brushed upon a very fine wire cloth until all its farinaceous portion had passed through. That which remained on the sieve, being direct from the meal, was designated *proximate bran*, and it varied in proportion, according to the kind of wheat, from 16·80 to 19·30 per cent. of the crude meal, and 10·58 to 13·24 per cent. of the standard meal, or a mean of 18·23 per cent. for the former and 12·19 per cent for the latter. Therefore, wheats generally may be said to consist of 81·72 farina and 18·28 branny matter per cent. The proximate brans of the different samples of crude and standard meals were next enclosed, separately, in very fine, white cotton cloths, and kneaded under relays of cool water until the latter ceased to become the least cloudy, and by this treatment they were reduced in weight rather more than one-half. The residue left I distinguish by the name of *absolute bran*, because it has parted with all its matter separable by the means employed. It will thus be seen that cool water alone has taken out of the proximate bran and into solution or intimate suspension upwards of 50 per cent. of its original substance. And what is no less remarkable, the ratio of absolute bran to the meal is a uniform fixed quantity for all the wheats indifferently, being 9·65 per cent. from the crude and 5·80 per cent. from the standard meal, notwithstanding that the proximate brans, whence they were derived, are variable in their quantitative relations to the meals. Therefore the total of actual bran in any wheat does not exceed 10 per cent.

Not yet satisfied that this absolute bran was exhausted, I next proceeded to ascertain if the proximate bran would yield more of its substance to artificial digestion than it does to water, and therefore it was subjected, under proper conditions, to the action of diastase, pancreatin, and pepsin consecutively. The result proved that the 9·65 per cent. of absolute bran from the crude meals had become reduced to 7·87, or 18·44 per cent., and in like manner the 5·80 per cent. of absolute bran of the standard meals lost 21·38 per cent., having been lowered to 4·56 except for one of the red wheats, which gave rather less difference for both meals, and seemed to be erratic. As this residue could not be resolved further by any controllable means, it takes, logically, the title of *ultimate bran*; and it would represent the final state and proportion of the bran if the process of artificial digestion left it free from variable quantities of assimilable matter. But digestion outside of the human stomach does not correspond with that inside, however skilfully it may be imitated, for there is some force at work in the one which cannot be commanded in the other; and probably, therefore, yet more of the bran is assimilable under more natural conditions. At the worst, the standard granular meal of my system has only 4·56 per cent of undigestible matter. Very interesting, too, in this connexion is the fact that this absolute bran not only loses density in becoming ultimate bran, but also drops as respects its mineral matter from 5·36 to 0·33 per cent. for the crude meal, and from 4·33 to 0·43 per cent. of the standard meal; or, in other words, the 2·42 and 2·36 of phosphoric acid which they represent fall nearly to zero, being drawn out by the process of digestion. Moreover, the total nitrogen, 2·17 per cent. (containing albuminoid nitrogen, 1·80), of the crude meal brans becomes 0·82 (containing albuminoid nitrogen, 0·78); and under corresponding circumstances the total nitrogen, 1·92 per cent. (containing albuminoid nitrogen, 1·86), of the standard meal brans falls to 0·80 per cent. (containing 0·80 albuminoid). Thus, although artificial digestion draws out the whole of the phosphates or mineral matter, and 60 to 70 per cent. of the nitrogenous matter, that portion of the latter which it leaves is—wonderful to be told—all or nearly all albuminoid.

Results could not be more impressive than these as to the superior nourishing value of whole wheat meal, for they prove that the separation and rejection of the bran must inevitably impoverish the residual farina or flour. This fact obtains additional confirmation in my own every-day life, for whole-meal bread, which forms four-fifths of my restricted diet, nourishes me satisfactorily; whereas any attempt to vary it in the least, with fine white flour bread, brings back bodily discomfort and debility. In the course of my laboratory work upon this subject, I also learned that, unusually fine as are the fermentation breads of my system, non-ferment breads can be made to excel them in every respect. But it is necessary to follow throughout a strictly philosophical method, and then they will require less time and labour in their manufacture, be independent of a choice of wheats and always sweet and appetising. "Baking powders," however, must not be employed for generating the carbonic acid gas which is to vesiculate the dough, as they leave chemical residues in the baked loaf which render it unwholesome. Nor must the carbonic acid gas be dissolved in the water for mixing the dough and forced in mechanically, for though it would aerate the loaf it will not produce perfect bread. To promote the hydrolysis whereby the cerealine with water replaces yeast, leaven and fermentation, and to facilitate the osmotic action upon which the metamorphosis of dough into bread largely depends, the carbonic acid gas must be in the nascent state and generated within the dough.

Alexandra-road, N.W.

CASE OF DOUBLE OVARIOTOMY.

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THE following report of a case of double ovariotomy contains some points of special interest, which may render it worthy of insertion in the columns of THE LANCET.

E. R——, aged thirty-six, wife of a farm-labourer, a healthy-looking woman, married at the age of seventeen, came to New Zealand in 1874, having four children; since her arrival in the colony she has had three more, besides three miscarriages. She states that her mother died in childbed, at the age of thirty-two. She first noticed an enlargement of the abdomen in 1877. In September, 1883, she first experienced abdominal pain, which occurred after running a short distance. She applied then to Dr. Beale of Hamilton, who diagnosed an ovarian tumour of the left side. It caused very considerable enlargement of the abdomen, and extended about three inches above the umbilicus. The tumour was freely movable. It was increasing in size, and pain was constant. Two months later she came under my care in the Auckland Hospital (Nov. 1883). I aspirated the tumour, and through a large needle withdrew twenty-eight ounces of a jelly-like matter that became solid immediately; so thick and viscid was it that its withdrawal occupied an hour and a half. The size of the tumour was not very materially diminished after the operation. She then returned home. Her health was excellent, and the catamenia regular. Three months later Dr. Beale reported that the tumour was rapidly increasing and that her health was failing. The patient was suffering from dyspnoea and difficulty of micturition, and the tumour became so large that she was unable to move about. I then decided to operate and elected to do so at her own house in Hamilton, 100 miles from Auckland. On examination prior to operation, I found that the patient had assumed a cachectic appearance; the abdominal circumference at the umbilicus was forty-five inches; the womb measured three inches and a half, and was not movable. On Feb. 14th, 1884, assisted by Drs. Beale, Blunden, and Mr. R. F. Sandes, I operated. An incision of six inches exposed the tumour. Spencer Wells's cannula failed to withdraw the contents of the cyst. I then made an incision into the cyst sufficiently large to admit the hand, and brought away in successive handfuls some pints of a similar matter to what had previously been removed by aspiration. I was then able to pass the hand round the tumour. I found that it was irregularly lobulated and polycystic. A few adhesions to the omentum existed. The smaller cysts I broke down from within, and scooped out the contents with the fingers. The omental adhesions were tied in segments with fine whipcord, and a few bleeding points touched with solution of perchloride of iron. On examining the right ovary another tumour was discovered. It was about the size and shape of a full-sized fœtal head, perfectly smooth, with white opaque walls. Its contents consisted of thick cheesy matter, studded with fine hairs, and was evidently a dermoid cyst. The left pedicle was narrow and of medium length, the right short and thick. The right pedicle was tied in two segments with stout whipcord and returned; the left was secured with a Spencer Wells's clamp. The tumours being then removed, the abdomen was carefully cleansed with a 1 in 60 carbolic lotion, the wound secured with deep sutures of wire and superficial ones of carbolised gut, and a rubber drainage-tube inserted. A dressing of several layers of thymol gauze and an abdominal bandage completed the operation. The patient rallied well, and spoke cheerfully on recovering from the effects of the anæsthetic. Half a grain of morphia was administered hypodermically. Having to return immediately to Auckland, Drs. Beale and Blunden took charge of the patient. The highest temperature recorded was 101·8° on the afternoon of the day succeeding the operation. She had some vomiting, which was restrained by ice, and some attacks of pain, relieved by morphia. No drainage took place through the tube, which was removed on the fifth day. An enema given on the sixth day opened the bowels freely. The dressings were not removed until the tenth day, when the greater portion of the wound had healed, and the clamp separated. The sutures were removed on the twelfth day. From this time the patient made uninterrupted progress; the wound had entirely healed on March 10th, twenty-five days after operation, and the patient was able to resume her ordinary duties. The weight of the cysts and contents was thirty-six pounds.

Remarks.—The points of special interest in this case which induced me to report it are: the nature of the cyst contents, the complication with the large dermoid cyst, and the good results obtained under the different methods of treatment of the pedicle. No special antiseptic precautions were taken during the operation, but the apartment had been thoroughly cleansed with antiseptics. The abdomen was washed with a weak solution of carbolic acid, and the dressings were of an absorbent and antiseptic character, which admitted of their being left undisturbed until separation of the clamp had taken place. The district where the operation was performed is a thinly populated one, well elevated above the sea, and of a very healthy character. The house of the patient is an ordinary labourer's cottage, detached, and surrounded by eucalyptus trees; the time of year midsummer, with the temperature of the atmosphere in the apartment ranging from 65° to 70°.

Social Science Association.—The Council of this Association, have, after due notice given, unanimously passed a resolution to the effect that, in prospect of a general election in the month of November, it is undesirable to hold a congress during the present year. They have, therefore, been reluctantly compelled to decline the invitation received from the City of Bath to meet there in the forthcoming autumn, but they have expressed a hope that the invitation from that city may be renewed for the year 1886. It has, however, been referred to the Executive Committee for consideration, and to report whether a conference of a more limited nature should not be organised in London, on some special subject or subjects to which, in view of the opening of a new Parliament, it may be considered desirable to call attention.

A Mirror

OF

HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

TRAUMATIC ANEURYSM OF THE ULNAR ARTERY; OPERATION; RECOVERY.

(Under the care of Mr. Bellamy.)

Aneurysm of the arteries of the forearm, even of a traumatic character, is a rare disease, especially in the upper third; and the ulnar, from its position and depth, is less likely to be affected than the radial. The distance of the vessel from the surface, which is important in protecting it from wound, makes the operation which was required in this case more difficult of performance when the wound has been inflicted, and the presence of firm blood-clot, such as would be found eleven days after the injury, obscures the vessels when reached.

J. J. O'N——, a clerk in the Civil Service, was admitted on Jan. 12th with a wound inflicted with a desk knife, which entered about two inches the flexural fold of the elbow and rather to the inner side of the middle line, about a third of an inch long. Just before he came in the blood spurted out of the wound in great quantity. A firm compress was applied; and as there was no recurrence of bleeding and no appearance of a false aneurysm, he was on the 14th made an out-patient.

On Jan. 16th a little suppuration was observed in the wound, and on the following Monday night the pain was so severe from the tight bandage that sleep failed him. On the morning of the 20th he was seen by a private surgeon, who removed the tight bandage and syringed the wound out with carbolic lotion, after having pressed out a quantity of matter. On the following morning a sudden and severe spurt of blood occurred, estimated at about five ounces. Pressure on the wound stopped the bleeding. In the evening he was admitted, at 7 P.M., in consequence of a fresh and severe occurrence of hæmorrhage (about ten ounces).

Jan. 22nd.—The patient had his arm raised and very tight pressure applied over the wound by means of a pad. No fresh hæmorrhage has occurred since his admission to hospital. The patient looked somewhat blanched.

23rd.—As a fresh and unquestionably arterial hæmorrhage occurred in consequence of the bandage being loosened—the column was six inches high—Mr. Bellamy proceeded this day to operative measures. A tourniquet had been applied to the brachial artery to arrest bleeding. This was of course kept on during the operation. The wound was first enlarged, both up and down, with a probe-pointed bistoury, coagula of blood being found lying over the vessel and choking up the wound in every direction. On these being cleared away, the gaping open mouths of a wounded artery were seen. The vessel was as nearly as could be divided right through by the original injury, hanging together only by a thin shred. Mr. Bellamy ligatured the open ends of the vessel, divided the connecting links between the open ends, placed ligatures on one or two bleeding points, and cleared out all the clots, one of which had consistency in its walls, and could be called a diffuse traumatic aneurysm. The artery was unquestionably the ulnar, as the nerve was lying close to its inner side. Strict antiseptic precautions were observed; the wound was not closed, but a drainage-tube laid in and fastened with one stitch.

26th.—The patient is easy, and the wound looking healthy.

29th.—Granulations springing up of a healthy kind all over the wound. Drainage-tube no longer required. One catgut ligature visible. Patient still somewhat pallid.

The wound healed very rapidly, and the patient left, cured, on Feb. 10th, the circulation being thoroughly maintained in the hand and forearm, and there being no symptoms of injury to the ulnar nerve.

LEEDS UNION INFIRMARY.

THREE CASES, WITH POST-MORTEM EXAMINATION, ILLUSTRATING SOME POINTS IN CEREBRAL LOCALISATION OF FUNCTION.

(Under the care of Dr. Jas. Allan, Medical Superintendent.)

Case I. *Cerebral Softening: Paralysis: Death. Autopsy: Lesions of Basal Ganglia and of Third Left Frontal Convolution.*—Catherine F——, aged sixty-six, was admitted on Sept. 15th, 1882. She had been quite well and strong up to the 5th, when she had a fit and became paralysed on the right side.

On admission there was paralysis of the right upper and lower extremities, the facial muscles not affected; her articulation was thick and indistinct, and she complained of great pain in the paralysed limbs. The patient was emotional, noisy at night, but apparently unconscious of so being. The pain referred to continued throughout her illness.

On Nov. 17th she had an epileptiform fit, became unconscious and remained so, groaning continuously till death on the 23rd of November. After the fit the patient's face was strongly drawn to the right, and the right lower limb was firmly flexed on the abdomen. Reflex action exaggerated; the left lower limb sprawled about over the bed; reflex action subnormal. Both eyes were drawn to the right and upwards; the pupils dilated, but sensible to light. Saliva dribbled from the mouth; power of swallowing lost.

Autopsy a few hours after death.—Skull-cap very thick, half an inch at parts; membranes on the vertex of the brain opaque and thickened; a large amount of fluid in the membranes; the brain tissue generally abnormally firm, but a portion of the left hemisphere behind, and including the third left frontal convolution, was very soft on palpation, and here the membranes could not be removed without brain tissue adhering to them. On section of the right hemisphere the brain was found much too firm in consistence; the lateral ventricle was rather small; a very large artery entered the corpus striatum. Section of the left hemisphere showed that the left corpus striatum was softened to diffluence; there was also softening of a limited area of the contiguous anterior part of the left optic thalamus; softening also involved the left hemisphere from the corpus striatum outwards and upwards to the surface, including the posterior part of the third left frontal convolution. The softened tissue was greyish and darker than normal; there was no hæmorrhage, or evidence of old hæmorrhage. The whole brain weighed 38 oz.; the cerebellum and pons alone weighed 5½ oz. There was aortic incompetence; atheromatous degeneration of the valves and of the aortic arch; the left ventricle much hypertrophied; weight of heart 12 oz. The liver and kidneys were cirrhotic.

Case 2. *Convulsions: Loss of Sight: Death. Autopsy showed extensive Areas of Softening, including part of Optic Thalamus.*—James R——, aged sixty-four, a shoemaker, was brought in by the police on December 9th, 1882, having been found in an unconscious state. He gradually recovered consciousness, and in a few days was apparently quite well; his memory, however, was very defective; he had an anxious expression, as if in dread of some imminent danger, and complained of pain in the back of the head. Ophthalmoscopic examination revealed nothing abnormal. The patient was an inmate of this infirmary until his death, on June 12th, 1884. At intervals of six weeks or two months during his stay he was suddenly seized with very violent epileptiform fits, would continue two or three days after each attack dazed and ill, and then get about as usual. For a week before death he was, on account of the frequency and severity of the fits, entirely confined to bed. The muscular contractions were usually general, but always more marked in, and sometimes confined to, the left upper and lower limbs and the left side of the face. When not convulsed the patient was quite conscious, and had perfect use of his limbs. He became completely blind of both eyes four days prior to death. There was no pain referred to the eyes; sight not previously affected. It was found on inquiry that this patient had had two fits, one a year, the other six months, previous to date of admission. He was described as having been ill for three months after the first, and is said to have lost his speech for a time after the second seizure. There was nothing peculiar in the family history of this man; no previous illness; but he was much given to drink.

An autopsy of the head was made a few hours after death. The scalp was adherent; calvaria of normal thickness; membranes of the brain much thickened; a considerable amount of fluid in the subarachnoid space. There was a small osseous plate in the falx cerebri just over the crista galli. On removing the brain a large quantity of fluid escaped from the ventricles. Arteries at the base much degenerated, atheromatous, and calcareous. In the situation of the left supra-marginal lobule there was a large deficiency of brain tissue; the gap was triangular in outline, the two longer sides of the triangle, about one inch and a half each in length, were formed by the ascending parietal convolution and by the superior temporo-sphenoidal convolution; the base of the triangle, about an inch in length, was in the occipital lobe; in shape the gap was somewhat pyramidal; its apex reached the descending cornu of the left lateral ventricle on a level with and just behind the ventricular projection of the optic thalamus, and was only separated from the lateral ventricle by its ependyma, which was much thickened. Both lateral ventricles, much dilated, presented large vessels ramifying on their walls. The left corpus striatum and optic thalamus were normal in consistence. In the right lateral ventricle there was softening to diffluence of the floor behind and external to the optic thalamus; it extended close up to and included the posterior part of the optic thalamus to the depth of about half an inch. Both hippocampi were involved and the surrounding cerebral tissue, downwards to the inferior surface of the occipital lobe, and backwards—that part of the occipital lobe directly behind the lateral ventricle. The corpus striatum of the right side was normal, also the anterior part of the optic thalamus. The brain weighed 43¼ oz., the cerebellum and pons alone $4\frac{15}{16}$ oz.

Case 3. *Heart Disease: Hemiplegia: Death. Autopsy showed Softening of one Corpus Striatum and part of Optic Thalamus.*—William H——, aged thirty-seven, a slater, was admitted on March 24th, 1884, with paralysis of the left side. Paralysis came on after a fit on the day previous to admission. Cramps and numbness of the left lower limb preceded the fit a few hours. Just before his illness he had got cold and wet from working on a roof covered with hoar-frost. He had not had any illness; said he never had venereal disease; was a moderate drinker. On examination he was found to have complete motor paralysis of the left upper extremity, and nearly complete motor paralysis of the lower; muscles of the face not affected. He experienced intense pain referred to the right ear and radiating over the right side of the head; nothing abnormal detected in the right ear. The pupils were unequal, the right contracted and the left dilated. There was evidence of aortic disease and cardiac hypertrophy. The patient was ordered iodide of potassium in increasing doses, and blisters were occasionally applied behind the right ear.

April 5th.—Earache and pain not so excessive. Temperature 98°; pulse 66.

27th.—Progressive emaciation; headache. Retinal hæmorrhages were found on ophthalmoscopic examination; sight not affected.

July 8th.—Both pupils dilated, the left more so than the right; frontal headache. Temperature 98·2°; pulse 84.

15th.—He feels very unwell; headache frontal and above the ears. Temperature 103°; pulse 132.

17th.—Headache nearly gone; he is very anæmic. The patient is troubled with dreams, of the unreality of which he can with difficulty convince himself. Morning temperature 99·4°; pulse 84. Evening temperature 98·4°; pulse 96.

27th. Temperature normal; pulse 84, dicrotic.

August 4th. Temperature subnormal; frontal headache. Has Cheyne Stokes' respiration; the accelerated respirations are brought on by any change of position in bed or by coughing; pulse feeble and irregular, varying from 96 to 120.

7th. Respiration frequently of Cheyne Stokes' character. Temperature 97·5°; pulse 120; has a troublesome short cough.

8th.—Has dyspnœal paroxysms; distressed expression; not much headache. Evening temperature 98·8°; pulse 120 to 144 per minute.

9th. More intense dyspnœal attacks. Death took place, the immediate cause being œdema of the lungs.

The patient was confined to bed during the whole time of his illness. Soon after admission the use of the left lower limb was to a considerable extent recovered; he could get out of bed and walk fairly, dragging the paralysed limb.

aneurysm was occupied by a healthy granulating wound. On May 17th the patient was discharged with both wounds soundly healed. The author remarked that the aneurysm had formed so rapidly, had attained so large a size, its increase was so marked during the few days it was under observation, and the sac was so thin, that ligature was resorted to without any attempts to cure it by pressure. Mr. Walsham had collected all the cases of aneurysm in the groin published in the English weekly periodicals, &c., since 1870. They numbered sixty-seven cases. Of these, thirty-six were treated by pressure, or by pressure and subsequent ligature. In nine only was pressure successful; in two of the remainder pulsation ceased in the sac, but the patients died apparently from the effects of the pressure. In the rest, pressure failed entirely, and ligature had to be resorted to. But not only in these did pressure fail to cure the aneurysm, but it appears in fifteen to have placed the patients in a worse condition for subsequent ligature, and in some in considerable danger of their lives. In three or possibly four, death seemed attributable entirely, or in great part, to the pressure. In face of these results, Mr. Walsham was inclined to question whether, as generally taught, pressure ought as a rule to be attempted in aneurysms of the groin before resorting to ligature. Since the revival of the method of applying two ligatures and dividing the artery between them, this appears to be the first case in which it has been employed on the external iliac. The advantages claimed for the method are—1st, that it diminishes the risk of secondary hæmorrhage by removing longitudinal tension of the vessel, and by ensuring that no part of the artery above the upper and below the lower ligature is deprived of the nourishment it receives from its sheaths; and 2ndly, the artery being divided completely across, there can be no chance of its calibre being restored through the slipping of the knot, the too rapid absorption or giving way of the ligature, or the failure of division of the internal and middle coats. A restoration of the calibre of the artery from one or other of these causes has now in several instances led to a return of pulsation in the aneurysm, and in consequence, in some cases, to its rupture and fatal hæmorrhage. In the last place, Mr. Walsham advocated the leaving of the suppurating sac to nature, in place of incision, and turning out the clots as advised by many—a proceeding which has led to severe, or even fatal hæmorrhage. —Mr. Durham had seen a remarkable case of inguinal aneurysm twenty-five years ago under the care of Mr. Hilton. A silk ligature was placed upon the artery, probably the common iliac. Although suppuration of the sac ensued, the patient ultimately recovered; and four years later an aneurysm of the other side appeared, which was cured by compression of the common iliac artery by means of Pancoast's tourniquet. The patient lived five or six years, and then died of aneurysm of the aorta.—Mr. Charters Symonds said that the kind of ligature and the method were the points still under discussion. From Mr. Morris's and Mr. Hutchinson's statistics no comparison could be made between the relative values of silk, catgut, and kangaroo tendon as ligatures. He said that fresh statistics were required before we could arrive at a comparative value. At Guy's Hospital the use of catgut and antiseptics had rendered very infrequent the occurrence of secondary hæmorrhage.—Mr. R. J. Godlee asked whether the kangaroo tendon was rendered aseptic by any means, and also whether there were any signs of the ligature coming away. He had known such ligatures to come away some time after the operation; in a case of subcutaneous ligature of a nævus two months elapsed, and then a ligature was removed from the wound. He thought that double ligature with division was a sound operation.—Mr. T. Smith said that he was the first to do the operation of double ligature with division between at St. Bartholomew's Hospital. He had pursued this plan with every artery in the body except the subclavian. Last year he ligatured with kangaroo tendon the external iliac artery, with a successful result. Many of his colleagues were converted to this method, which was the one which Carden of Worcester had suggested to Mr. Smith many years ago. The double ligature did not allow of pockets of pus to accumulate, for the divided ends of the artery retracted to varying degrees according to the artery concerned. There was less risk of secondary hæmorrhage from an artery in a stump because the artery was relieved from all tension, whereas much elastic tension existed in a vessel ligatured in its continuity. The whole wound was laid open from the bottom if the artery were divided between the two ligatures, and nothing like a separate sinus existed between the artery and vein such as was the case when a single ligature was used.—Mr. Howard Marsh was one of those who had formed a favourable estimate of the method of double ligature with division of the vessel between. In this operation there was a greater certainty that the vein would not be wounded. In at least two instances he had seen the femoral vein wounded, and in one case the needle was passed through the vein, and pyæmia resulted. The division of the artery allowed of full contraction and retraction of the ends, as happened in *spontaneous arrest of hæmorrhage*. It was true that Mr. Syme had ligatured in their continuity thirty-one arteries without a fatal result, but such success it was not for everyone to expect. He thought it was far better to ligature the external iliac without attempting to cure the aneurysm by compression. Pain, delay, and uncertainty were the objections encountered in treating the aneurysm by compression.—Mr. Walsham replied that the kangaroo tendon was steeped in a strong solution of carbolic acid. He did not agree with Mr. Symonds, for he considered that the statistics which he had furnished, dating as they did only since 1870, supplied a comparison, for many of the cases had been treated antiseptically, and catgut and kangaroo tendon had been used.

Dr. Dickinson and Mr. Rouse read a paper on a case of Renal Lithotomy. The subject of this case was a young man who had been in St. George's Hospital under the care of Dr. Dickinson, as far back as 1877, with hæmaturia, due, as was considered, to stone in the kidney. He was last admitted in April, 1884. His age was then nineteen. His parents had been on the previous occasion advised to bring him up to a sedentary occupation, instead of which they made him a blacksmith. He suffered from repeated hæmaturia, brought on either by exertion on movement or by drinking beer, and had occasional pain in the right renal region. The urine was bloody, there was no albumen except what was due to the blood, and the diagnosis of stone in the right kidney appeared to admit of no doubt, while excepting the stone there appeared to be no renal disease. The patient was somewhat spare in frame, and appeared to be so favourable a subject for operation that Dr. Dickinson requested Mr. Rouse to undertake it. This was accordingly done on May 8th, 1884. An incision was made in the right loin as in Amussat's operation, the kidney exposed, and a stone felt inside it with the finger and with a needle. The kidney was then incised, a stone weighing sixty-five grains removed, and a smaller one felt, which eluded the attempts made to extract it. This, however, which was found to weigh only two grains, came away spontaneously on the fourth day after the operation. The larger stone was about as large as a filbert, the smaller the size of a pea. They were not cut, but presented the appearance externally of oxalate of lime. The urine discharged abundantly through the wound. The progress of recovery was interrupted by an attack of septicæmia, which was almost indistinguishable from pyæmia. A severe rigor occurred on May 22nd, and was repeated on many subsequent days. The temperature went up to 107°, and presented a daily maximum which for twelve days, with one exception, ranged between this point and 103°, while eleven days elapsed before it assumed anything like a normal level. The febrile attack was accompanied at its commencement by pneumonia, as was shown by the characteristic expectoration, and later by rheumatoid swellings of several joints, notably of the left elbow, wrist, and knee, all of which were red, painful, and tender, while the knee contained an appreciable amount of fluid. Quinine and stimulants were freely given, under which the adverse symptoms disappeared. The wound in the meanwhile had been healing without interruption, and on July 16th was closed. The patient was last seen on October 27th, when he returned to the hospital to show himself. He was in perfect health, and was about to resume his work as a blacksmith. The stones were exhibited.—Mr. Durham made mention of the fact that Mr. Thomas Smith was the first to advocate this operation, though he believed that he (Mr. Durham) was the first, in recent times, to attempt the operation of removal of a renal calculus; owing to a mistaken diagnosis no calculus was removed. Mr. Morris was the first to perform the operation successfully.—Mr. Smith thanked Mr. Durham for referring to his inauguration of the idea of renal lithotomy, and said that it was not till two months ago that he had had the opportunity of performing the operation. Even when the kidney was exposed it was sometimes impossible to detect the actual existence of a stone. He had recently removed the kidney for calculus, and yet thorough external exploration (the kidney was not punctured) failed to detect the stone. A detached calculus, with much phosphatic débris, was first seen on incising the kidney after its removal. He was not sure which would prove the less dangerous operation, nephrectomy or nephrotomy.—Mr. WALSHAM alluded to a case of nephrectomy which he had performed on a woman, aged forty-three, about two weeks ago. There was no hæmaturia at any time, but much pus in the urine; in the right lumbar region a large swelling existed. The kidney was reached by a lateral incision between the anterior superior spine and the left rib. A large branched stone was found, but he had to remove the kidney; the nephrectomy was accomplished after considerable difficulty; some collapse followed, but the patient was in a fair way of recovery; the urine was clear and free from albumen.—Dr. F. L. BENHAM said that Armstrong had advocated calomel as a treatment for pyæmia, and questioned whether the improvement in Dr. Dickinson's case did not result from the external use of calomel.—Mr. CHARTERS SYMONDS put the question whether, in a man suffering from renal colic or intense pain due to kidney disease, it was justifiable to remove the kidney. He referred to cases that had been under his observation, and to one in which a urinary abscess, situate behind the peritoneum, was drained: death ensued from peritonitis, which was not related to the operation, but was due to the primary renal disease.—Mr. WARRINGTON HAWARD was of opinion that exploration, even with incision, was far less dangerous than nephrectomy when the surgeon was doubtful whether a stone was present or not. He related a case in which all the symptoms pointing to a renal calculus were present in a young man: digital exploration and puncture detected no stone, but he did not proceed to remove the kidney, for he was very doubtful of the wisdom of such a procedure. In a case in which he had removed a stone from the kidney there was much suppuration; incision allowed of drainage as well as removal of the stone, and the patient did well.—Mr. R. J. GODLEE thought that our surgical experience had taught us that nephrectomy was a most dangerous operation, and likely to cause death in exhausted states of the system. Some old cases of kidney disease might be dealt with much more freely than was perhaps generally thought. He referred to a case of renal calculus in a woman from whom he had removed a stone first and the kidney later on; the shock was comparatively slight in both operations, and by the time of the second operation the kidney had shrunk to a very small size. He differed from Mr. Rouse, and thought it was possible to keep the wound aseptic notwithstanding the presence of urine.—Dr. DICKINSON felt most strongly that the removal of a kidney was a most unwise procedure when incision would effect practically all that was necessary. He did not think that the calomel had much to do with the recovery of the patient from the pyæmic-like symptoms.

Mr. R. W. PARKER showed a little girl, aged five, in whom he had performed thyrotomy for papillomatous growth in the larynx seven months ago. Recovery followed, with preservation of voice. A paper on the case will be read in full in the early part of next session.

Mr. J. R. Lunn showed: Four cases of Osteitis Deformans and microscopical sections of Diseased Tissues. Mr. Rushton Parker: A case of Ununited Fracture of Olecranon, wired antiseptically, with close union of fragments. Dr. Stephen Mackenzie: (1) A case of Osteitis Deformans; (2) A case of Hereditary Multiple Tumours. Dr. Hadden: A case of Obstruction of Arteries and Veins which had lasted many years.

HARVEIAN SOCIETY OF LONDON.

A MEETING of the above Society was held on April 16th, Dr. T. Morton, President, in the chair.

Dr. R. W. BURNET read notes of a case of Ulcerative Endocarditis, which had been under his care for two months in the Great Northern Central Hospital. The earliest complaint had been of slight pains and swelling of the limbs. The symptoms having become acute, the patient was admitted into hospital. She was then weak, pale, and somewhat emaciated; skin dry and harsh; pulse 110; temperature 102·5°; respiration [illegible]; heart's impulse normal; a systolic thrill, and a systolic murmur audible at apex and in the axilla. Ulcerative (or infective) endocarditis was diagnosed. The patient gradually got worse. The temperature varied from 100° to 104·5° F.; and the pulse from 120 to 130; the murmur became very rough and the urine albuminous, and the patient gradually sank. Post-mortem: Lungs congested and œdematous; pericardium thickened and adherent; ventricles thickened and dilated; mitral valve thickened, but smooth; posterior surface of left auricle covered with adherent vegetations; aortic valves incompetent, thickened, and thrown into folds; aorta healthy; large infarct in spleen, and two other infarcts of older date. No noticeable changes in the other organs. Dr. Burnet gave abstracts of three other cases, one of which had been under observation for four months. In this case there were, in addition to extensive disease of the heart, pleurisy, pneumonia, and pericarditis. The heart was very large, hypertrophied, and dilated; the mitral valve and chordæ tendineæ much thickened; on the mitral and in the left auricle numerous vegetations; emboli in the spleen and left kidney. In one of the other cases there was gangrene of the foot. Dr. Burnet pointed out that the first case was typical of a class of cases in which endocarditis followed upon old rheumatic mischief, and that the rheumatic symptoms need not be severe, although the cardiac affections may ultimately prove fatal. Dr. Burnet alluded to the recent Gulstonian lectures by Dr. Osler, and quoted the views of the latter in reference to this form of endocarditis.—Dr. BROADBENT commented upon the pathology of the affection and upon the usual modes of death. Occasionally cases might recover; of this there existed clinical as well as anatomical evidence.—Dr. EWART called attention to the fact that fatal endocarditis often ran its course without any ulceration. Applied to such cases the term "ulcerative endocarditis" was a misnomer. It might be well to discontinue the use of the prefix.—Dr. J. WILLIAMS referred to a case of the disease occurring in the puerperal state. Independently of endocarditis, cardiac murmurs were very common in puerperal women.—Dr. ANGEL MONEY had recognised the presence of a bruit over the site of the left auricle and at the fourth cartilage in 60 per cent. of Dr. Williams's puerperal patients. This was probably due to the hypertrophy and dilatation of the heart, and to physiological changes in the composition of the blood.

Mr. J. ERNEST LANE read a paper on Hæmophilia. Having dwelt upon the hereditary nature of the affection, he referred to its marked prevalence in the male sex. In the female the disease probably remained in a latent form. Thus the daughters of a male patient, although exempt, might transmit the idiosyncrasy to their sons, whilst the direct male descendants remained healthy. Attention was also drawn to the fact that "bleeder" families were unusually prolific, the number of births being almost double the ordinary average. The comparative rarity of the disease was explained by the fact that in these families the number of sons far exceeded that of the daughters. Of thirty-seven children born in six of these families, twenty-seven were boys and ten girls. The symptoms were classified under the following headings: 1. Spontaneous bleedings. 2. Traumatic bleedings. 3. Effusions into joints. Referring to this last symptom, Mr. Lane considered that the swellings of the joints were usually due to synovial, and not to hæmorrhagic, effusion. The views of Virchow and of Wachsmuth as to the pathology of the disease were quoted. With regard to treatment, he recommended the habitual use of purgatives, such as sulphate of soda or compound jalap powder. The hæmorrhages should be treated by the use of styptics, preference being given to the perchloride of iron. He referred to a case in which transfusion had been performed by Dr. Samuel Lane when the patient was on the point of death from hæmorrhage induced by an operation for squint.—Dr. M. HANDFIELD JONES briefly narrated an example of the disease which had come under his notice in which the diathesis had been traced through three generations. There was apparently a close connexion between the number of members in a family and the fatality of the disease, the percentage of deaths from bleeding increasing as the number of children became larger. Moreover, among the younger children hæmophilia proved more rapidly fatal than in the earlier members. Dr. Handfield Jones differed from Mr. Lane in thinking that hæmophilic patients rallied quickly from large blood-losses. Mr. SEDGWICK looked upon hæmophilia as a congenital defect of the vascular system, and upon the associated affection of some of the joints as usually due to effusion of blood. The female transmitters did not exhibit any exceptional tendency to hæmorrhage even during childbirth. Families of bleeders both in this country and in America probably inherited the defect in many cases from a common source, through the occasional extension of the usual limits of atavism. In some forms of the diathesis, such as epistaxis, hæmoptysis, and umbilical hæmorrhage, the structural defects in the bloodvessels was more limited than it was in hæmophilia.

MEDICAL OFFICERS OF SCHOOLS' ASSOCIATION.

The annual meeting was held in the Medical Society's Rooms on Wednesday, April 18th, Dr. T. Fuller, President, in the chair.

Dr. **Alder Smith** reported that nearly six hundred copies of "The Code of Rules for the Prevention of Infectious Diseases in Schools" had been sold and distributed since the last meeting in January; and that the following gentlemen had joined the Association: Dr. Richards, of Winchester; Dr. Newsholme, of Clapham; and Mr. Brudenell Carter. The following members were elected on the Council in the place of four retiring: Dr. Briggs, of Harrow; Brigade-Surgeon Clarke, of Sandhurst; Dr. Fletcher, of Highgate; and Mr. O'Brien Jones, of Epsom College.

Dr. Withers Moore, of Brighton, and Dr. Littlejohn, of London, were elected members of the Association; and Dr. Thorne Thorne as the first honorary member.

Mr. **Brudenell Carter** then read a paper on Eyesight in Schools. The author commenced by setting forth the great importance of the question, not only to the scholars of the present generation, but also, possibly, to their descendents, and dwelt upon the necessity of caution in arriving at any conclusions upon the subject. He then proceeded to describe at length the peculiarities of the several conditions of refraction, emmetropia, hypermetropia, myopia, and astigmatism, the signs by which they were recognised, the sources of error in diagnosis, and the effects upon vision and comfort which they respectively produced. He discussed the view maintained by Donders, of the essentially diseased condition of the myopic eye; and showed that, although not universally correct, it was correct in the majority of instances, especially in all those in which the myopia was progressive in its character. He referred to a doctrine lately put forward by Mr. Berry, to the effect that increase of myopia might be regarded merely as a consequence of physiological growth, and showed this view to be incompatible with the clinical history of the affection, and also with the normal rate and amount of growth in the eye. After glancing at the original statistics by which Cohn, in 1867, called attention to the prevalence and progressive increase of myopia in German schools, he said that Cohn's investigations had now been repeated in various parts of the world by at least forty observers, and upon at least 50,000 children; and that, while different observers brought out different results as regarded the relative prevalence of various forms of defect, yet that all were agreed in maintaining the accuracy of the general principles which Cohn had laid down. In England but little evidence had been collected, although Mr. Priestly Smith had found 5 per cent. of myopia in Board School children, and 20 per cent. among pupil teachers taken mainly from the same class; while Mr. Adams Frost had found about 20 per cent. of myopia among London Board School children. Still, these figures, although confirming those obtained in other countries, were not sufficient to serve as a foundation for practical deductions; and the author proposed to rest his case chiefly upon the results published by a medical committee in Philadelphia, a committee presided over by Dr. Risley, and which appeared to have conducted its inquiries with exceptional diligence and care. After giving an account of the methods pursued by this committee, the author cited their figures to show that the increase of myopia, which seems to occur in all schools, occurred mainly at the expense of the hypermetropia and the astigmatism; and he drew the inference that these eyes were especially vulnerable, and that they required to be watched over during the progress of school life. He then proceeded to criticise in detail some observations recently published by Mr. Roberts, which purported to give the results of an examination of the eyes of the boys at Marlborough College, and endeavoured to show that these results afforded no support to the encouraging conclusions which Mr. Roberts had drawn from them, and that they only showed a great and lamentable prevalence of defective vision in the school. Finally, he dwelt upon the necessity of paying attention to the early signs of ocular discomfort in young children, whether at home or in preparatory schools, or in the junior classes of large schools, and expressed a hope that the members of the Association would make inquiries into the facts of the case, and would place themselves in a position to give utterance to opinions which would rest upon the solid basis of knowledge. The paper was illustrated by numerous figures and diagrams.

A discussion followed, and the meeting adjourned after a vote of thanks to Mr. Brudenell Carter for his paper.

MIDLAND MEDICAL SOCIETY.

At the meeting held on April 1st, Mr. T. H. Bartleet, President, in the chair,

Mr. H. **Bracey** showed a case of Myxœdema. The patient, a woman aged fifty-seven, presented all the usual symptoms of the disease. Her sister died last June of myxœdema in a London infirmary. The patellar reflexes in this case were increased, and the urine contained a trace of albumen.

Mr. J. W. **Taylor** showed an Instrument for Dilating the Cervix Uteri.

Mr. **Chavasse** exhibited a patient, aged nineteen, who had suffered from Necrosis of the Radius ever since he was an infant. Sequestrotomy had been performed nine times, as latterly the symptoms seemed suggestive of myeloid sarcoma; the entire radius was excised a year ago. The patient had now a useful limb, being able to feed and wash himself, and carry an ordinary bucket.

Dr. **Garman** showed Crystals of Leucin and Tyrosin from a case of acute yellow atrophy of the liver.

Dr. **Suckling** showed a boy who had suffered from Pachymeningitis Cervicalis Hypertrophica. The disease began three years ago with rigidity of the neck, shooting pains along the great occipital and other nerves, followed by paralysis of both upper extremities with rigidity, the hands being strongly flexed on the fore-arms. Paralysis with rigidity of both legs followed. The patient had been under Dr. Suckling's care for two years, and recovered entirely, with the exception of a little twitching of the left knee.

Dr. **Suckling** also showed a man suffering from Perforating Ulcer of the Foot, which was the first symptom of locomotor ataxy. There were two sinuses, one on the under surface of each great toe, opposite the phalangeal joint, which did not lead down to dead bone. The patient had suffered from these sinuses for two years. Dr. Suckling saw him about twelve months ago, when there were no signs of locomotor ataxy; but when examined last March loss of patellar reflexes, swaying movements, and the Argyll-Robertson pupil had supervened. There was no anæsthesia or sweating of the feet.

Dr. **Neale** showed an Instrument for Irrigating the Uterus, made of vulcanite, the chief object of its design being to combine in one piece the smallest injecting-tube with as roomy an ejecting one as possible, so as to allow of the immediate removal of débris from the uterus. The makers are Messrs. Woodall, York.

Mr. H. **Lupton** read a paper on a case of Intra-cranial Hydatid. The patient, a girl aged thirteen, had noticed a swelling on the head for about twelve months, which, after discharging purulent material, subsided, and refilled again repeatedly. Mr. Lupton at first thought he had to deal with a suppurating cyst, and proceeded to operate with the intention of dissecting out the cyst wall, but no cyst was to be found. The bone was rough, and an aperture was felt leading into the skull. The hole was just large enough to admit the tip of the little finger, and when the finger was withdrawn it was followed by an ounce or two of fluid, and about a dozen daughter hydatids. The cavity was washed out and drained; daughter cysts occasionally came away, but in about a month the cavity ceased discharging. The hole in the skull closed up, and the girl got perfectly well. The site of the perforation was close to the occipital protuberance.

Dr. **Headley Neale** read a paper on the Germ Theory of Phthisis, pointing out the difficulty of harmonising the theory of the micro-organismal origin of the disease with the well-established fact of its heredity, the arguments employed pointing to the conclusion that physico-chemical changes must precede the botanical aggression. The subject of the antiseptic treatment of phthisis was touched upon, the author drawing attention to the difficulty of applying antiseptic material topically to the air vesicles and their phthisical contents.

WEST HERTS MEDICAL ASSOCIATION.

THE seventy-fourth annual meeting of the above Association was held at Watford on the 8th ult. Twenty-four members were present. The President, Dr. P. Hood, in the chair.

Dr. C. E. SAUNDERS read a paper on Cholera, its Cause and Method of Propagation. The author referred to India as the home of cholera, and gave some chronological account of its early history in that country. He traced its advance in 1817 to parts of Europe, and in 1831 to England, where it remained fourteen months; the next visitation was in 1848–49, then in 1853-54, and the last 1865-66. Dr. Saunders discussed the various theories that have been promulgated as to the cause of cholera, and showed that many observations, although carefully made, contradicted one another, and from this drew the conclusion that cholera could not occur without its specific contagion, and that meteorological or other conditions had little to do with the dissemination. The one factor constant in all outbreaks was filth in some form or other, and the pollution of water certainly, and possibly other media through this means, with the excreta of cholera patients, which had been conclusively shown to contain the germs. He showed, from the conclusions arrived at by the two international sanitary conferences which had been held at Constantinople and Vienna respectively in 1856 and 1876, that cholera was not carried by the air for any but very short distances from the source of infection, and that no instance of an outbreak had ever been known to occur in less time than it would take a man to travel the distance, or, in other words, that human intercourse was the source of propagation. Dr. Saunders believed that Professor v. Pettenkofer's theory as to the conditions that were necessary for the naturalisation of cholera was worthy of great consideration. Pettenkofer believes that a soil permeable to air and water and containing much organic matter, with a fluctuating subsoil water, are essential conditions for cholera propagation. Although it was probable that the cholera poison was of the nature of a microbe which was swallowed in water, the author considered it was premature to accept the belief that Koch had discovered the bacillus on which cholera depended. Dr. Saunders insisted that cholera was a disease *sui generis*, and that it was mischievous and misleading to use that term for any but Asiatic cholera, and especially objected to diarrhœa being qualified by the prefix choleraic. In conclusion, he laid down rules for the hygienic management of a case of cholera, especially alluding to the precautions necessary to be taken in dealing with the excreta, and the best method of disinfection, enjoining the use of a perfectly pure water and food free from suspicion of contamination, and urged that the safest thing to do if a case of cholera occurred was to cause a revolution of all pre-existing domestic arrangements so far as concerned those persons who remained well, with a view of preventing further extension of the disease while an investigation was being made into the cause of the first outbreak. -In a discussion which followed, Mr. Cayley gave his experience of twenty-seven years of practice in India. He gave most valuable information as to the treatment of the disease, and considered that in the comma bacillus of Koch a valuable means of diagnosis was to be found. The President, Dr. Brett, and Mr Stradling joined in the discussion.

Mr. FISHER showed some photographs of an interesting case of Ichthyosis, which had greatly improved under treatment.

WATER-SUPPLY OF EPPING.—Last summer and autumn there were fully forty cases of diphtheria at Epping. The only water to be had in outlying parts of the parish was obtained from ponds, which in many instances had become absolutely putrid during the drought in summer; samples of such water were green and opaque. Some fresh wells were immediately sunk, and the water-mains of the East London Company were extended to Chigwell-row. Great difficulty still exists with regard to the water-supply of the town of Epping.

Reviews and Notices of Books.

Louis Pasteur: his Life and Labours. By his SON-IN-LAW. Translated from the French by Lady CLAUD HAMILTON. London: Longmans, Green, and Co. 1885.

AMONGST all the eminent men assembled last year at Edinburgh to receive honorary degrees and take part in the ceremony whereby the University signalised its tercentenary, there was no one who was more enthusiastically welcomed than M. Louis Pasteur. It was a striking testimony to the appreciation of his indefatigable labours in the cause of science and humanity, work which has in so many directions overturned accepted beliefs, and has done even more in the way of opening up new and well-nigh inexhaustible fields of research. It is, then, with peculiar pleasure that we have read this record of his life, which shows how he was led from one point to another, and how the chemist was by reason of his chemical studies compelled to become in turn the biologist and experimental pathologist. The memoir is from the pen of M. Radot, the son-in-law of the *savant*, one who has lived long in intimacy with Pasteur, and, as he charmingly relates in the preface, whom he prevailed upon to be permitted to undertake the welcome task. And it is to Professor Tyndall that we owe the appearance of the English translation, which was entrusted to a most careful hand, of this "Histoire d'un Savant par un Ignorant," to which Professor Tyndall has prefaced an introduction that admirably surveys the whole theme. Pasteur's first great discovery was in chemistry—viz., the discrimination of the tartrates and paratartrates by the difference in their behaviour to polarisation; but, as Professor Tyndall shows, his generalisation from this discovery, as establishing a line of demarcation between the inorganic and organic kingdoms, has not been verified. It was, however, in the studies of the properties of the tartrates that Pasteur was led to his greatest discovery of fermentation being due to the action of living organisms—a discovery from which so much has issued, not only in the interpretation of chemical processes, but in those of the living body in health and disease. It is impossible yet to say how far-reaching that law of fermentation is, for from it have flowed all the researches upon morbid germs and infective disease, which daily multiply in number. Pasteur's own life-pursuit was dominated by the ideas that arose from the facts which replaced for chemical phenomena the fact of the intervention of living organisms. Hence he was engaged in the now historical controversy with the naturalist Pouchet upon spontaneous generation—a controversy which has been so completely settled that it is now almost forgotten. It was a curious thing that the chemist should have had to contest the truth of the doctrine that living things can only arise from life, whilst the biologist was contending that inert matter could become endowed with attributes of vitality; but the whole question turned upon delicacy of experimentation and accurate deduction from such experiment, and no wonder that the victory remained with the former. But this controversy was but an incident in the life of the experimentalist. His studies on the diseases of wine and of beer, resulting in simple measures for ensuring the purity of these articles, did much for commerce, but most of all in its direct practical utility was the issue of his prolonged and patient labour in unravelling the causes of silkworm disease, which threatened a whole industry. The description of his work on this subject is as readable as a romance, and the gratitude of France was well earned. It was on the completion of this work that Pasteur was attacked with paralysis, but, happily for humanity, he regained his health and resumed his researches with unabated energy. Splenic fever, septicæmia, fowl cholera, the discovery of the vaccine of splenic fever and its practical application,—these and other researches alone would make his name famous. Throughout it all he has met with opposition, but his opponents have almost invariably had to admit they were in error. Even upon the question of anthrax vaccination, which Koch assailed, the issue of the controversy has been, not to invalidate the efficacy of such protective inoculation, but only to place a limit upon its period of protectiveness. It is to be deplored that the author of the memoir should have done Koch such scant justice; for it is doubtless true that it was his researches upon the bacillus of anthrax that stimulated Pasteur to study the subject. The work to which Pasteur has been devoting himself for the past two years—namely, the prevention of hydrophobia—forms the subject of the last chapter of the book, which closes with an anecdote describing Pasteur summoned to see two dogs in the last stage of the disease. One, a large bull-dog, was secured to the bars of the iron cage in which he was kept, and there "the dog, suffocating with fury, his eyes bloodshot, and his body convulsed with a violent spasm, was extended upon a table, and held motionless, while Pasteur, leaning over his foaming head, at the distance of a finger's length, sucked up into a narrow tube some drops of the saliva. In the basement of the veterinary surgeon's house, witnessing this formidable *tête-à-tête*, I thought Pasteur grander than I had ever thought him before."

OUR LIBRARY TABLE.

Cruise of the "Alert": Four Years in Patagonian, Polynesian, and Mascarene Waters (1878-82). By R. W. COPPINGER, M.D., Staff Surgeon, Royal Navy, C.M.Z.S. London: W. Swan Sonnenschein and Co. — Naval surgeons on foreign, and especially on tropical, stations have ample opportunities for making valuable original researches in various departments of natural history, and the number of those who have availed themselves of such opportunities is considerable. When it was decided by the Admiralty to send out a vessel to survey the Straits of Magellan, certain doubtful reefs and islands of the South Pacific, and part of the northern and western coasts of Australia, Dr. Coppinger was specially selected for the medical charge on account of his knowledge of and interest in natural history. The volume before us embodies the results of his observations, related in a pleasant and interesting account of the voyage. Though the work can only be fully appreciated by an accomplished naturalist, it is full of interest to the general reader, and contains, scattered here and there, several valuable anthropological and medical facts which are specially interesting to the members of the profession. For example:—"We arrived at Talcahuano, one of the most interesting of the Chilian ports, on the morning of the 20th of April, and were surprised and grieved to hear that a severe epidemic of small-pox prevailed at the town of Concepcion, some nine miles inland. The epidemic had begun in January, and we were informed by Mr. Elton, the British Vice-consul, that since then no less than 1500 deaths had occurred, the mortality of those attacked having been at the extraordinarily high rate of 90 per cent." Of some aborigines he saw on the N.W. coast of Australia, Dr. Coppinger says:—"The nose was aquiline, with broad alæ nasi, and having the septum perforated for the reception of a white stick like a pipe-stem; the upper lip, cheek, and chin were furnished with a moderate growth of hair; the teeth were regular—no incisors removed; trunk and extremities almost devoid of hair; the skin of the arms, chest, and abdomen, was decorated with cicatrices, which stood out from the skin in bold relief, having the form and consistency of cords. On the arms these scars were disposed in parallel vertical lines, while on the chest and abdomen they were in horizontal curves. Dr. Morice informed me that these ghastly decorations were produced in some way unknown, by means of a sharp-cutting instrument, and that no foreign substance is introduced into the wound. He had been unsuccessful in all his efforts to ascertain how the peculiar raised and indurated character of the sore is produced." The question here propounded may perhaps be regarded as worth attention by pathologists. The work is well printed and well got up, and contains many good illustrations. If a map could have been included, the intelligent perusal would have been greatly facilitated, as few persons know much of the geography of the places described, and even a good ordinary atlas affords but little of such information.

Injuries of the Spine and Spinal Cord. By HERBERT W. PAGE, M.A., F.R.C.S. Second Edition. London: J. and A. Churchill. 1885.—When Mr. Page's book first appeared we noticed it at some length. The first edition has been soon exhausted, and Mr. Page has been well advised in republishing it. The changes and alterations in the edition before us are not numerous, and the additions are few and not very important. We deem it unnecessary, therefore, to deal at length with the present volume, but we may repeat that it contains a valuable amount of information on the subject upon which it treats. The amount of matter in the present volume is as nearly as possible the same as in the last, but the size of the page and of the type has been slightly reduced, and the weight to hold in the hand while reading has been greatly lessened. This is a gain which authors are too apt to make light of in the present day.

The Student's Guide to the Medical Profession. By C. B. KEETLEY, F.R.C.S. Second Edition. London: Baillière, Tindall, and Cox.—To the second edition of this work additions have been made which more than double the size of the book. They include chapters on Drawing, on Student's Societies, on Provincial Schools, on Scotch and Irish Schools, on the Army and Indian Medical Services, on Lunacy Work, and other important subjects. Considerable pains must also have been taken to collect the information given in the chapter entitled "The Conditions under which Pupils are taken at the Provincial Hospitals." In the list of the several legal qualifications and honorary degrees obtainable, including the minimum qualification to practise (given on p. 17), we notice one serious omission: the diploma of L.R.C.P. Lond. is not mentioned, an error which will doubtless be rectified in another edition, which will probably be soon called for. The work supplies a need, and can be consulted advantageously by all who intend to devote themselves to the practice of medicine.

Archives Italiennes de Biologie. Tome VI., Fasciculus 2.—This number contains the following articles:—1. Clinical and Physiological Researches on Paraldehyde, by V. Cervello. 2. On the Physiological Action of Antipyrin, by F. Coppola. 3. Perimetry and Self-registering Perimeters, by L. Ferri. 4. On the Action of Common Salt on Cercaria and their Desiccation, by E. Perroncito. 5. On Cicatrisation of Wounds of the Kidney, and on the Partial Regeneration of that Organ, by G. Pisenti, with a plate. 6. On the Presence of Albumen in the Saliva and Bile of Albuminuric Patients, by M. Dessalles. 7. Researches on the Air-sacs of Birds, by E. Ficalbi. 8. On Numerical Anomalies of the Semilunar Valves, by G. Martinotti and G. Sperino. 9. On the Microphytes of the Normal Human Skin, by G. Bizzozero, with a plate. 10. On the Organ of Corti in Monkeys, by A. Tafani, with eight figures in the text. 11. Notes on the Anatomy of the Negro, by G. Giacomini, with two plates and three figures in the text.

Transactions of the American Ophthalmological Society. Boston: Published by the Society. 1885.—This volume contains an interesting record of the following cases:—Hysterical Monocular Blindness with Violent Blepharospasm and

Mydriasis, by Dr. Harlan; Neuro-retinitis with almost sudden Loss of Sight in both Eyes, by Dr. Knapp; Hereditary Atrophy of the Optic Nerves, by Dr. Norris; Myxo-sarcoma of the Orbit and Osteoma of the Orbit, by Dr. Norris; Glioma of the Retina, by Dr. Little; Myxœdema with Atrophy of the Optic Nerves, by Dr. Wadsworth; Multiple Colobomata of the Iris, by Dr. Mittendorf; Hypermetropia passing into Myopia, with symptoms simulating general Nervous Disease, by Dr. Risley.

Analytical Records.

[WE think it right to direct attention to the system we adopt in the conduct of this department. Of the numerous articles of food and medicine submitted to us for analysis we select such as we think important to the medical profession and the public. Samples of these are bought by us in the ordinary way, and the results of our examinations reported.]

CARNRICK'S PEPTONISED COD-LIVER OIL AND MILK.

(MALTINE MANUFACTURING COMPANY.)

THIS is an exceedingly perfect emulsion of cod-liver oil and condensed milk, the oil-drops appearing under the microscope no larger than the granules of wheat starch. When the oil and fat are removed by ether and a drop of potash, a liquid remains which coagulates with acetic acid, and is evidently modified casein. This emulsion shows no tendency to separation. It has little of the disagreeable taste of the oil, and will be taken with ease by many who cannot digest pure oil. It is certainly a valuable and trustworthy preparation.

KING'S WHEATEN FLOUR FOR INFANTS.

(ALBION FOOD MILLS, SYCAMORE-STREET, E.C.)

This preparation is described on the wrapper as "prepared solely from the finest wheat," and is stated to be "free from any chemical additions." So far our analysis confirms the description. But when it is added that the flour is "thoroughly cooked by a new and improved patent process," we confess ourselves puzzled, for a great part, if not all, of the starch is ungelatinised. We notice that in the directions for use the addition of boiling milk or water is insisted on. This, of course, amounts to cooking.

BROWNING AS A SCIENTIFIC POET.

ON Friday evening, April 24th, Mr. Edward Berdoe, M.R.C.S., read a paper at University College, Gower-street, before the Browning Society, on "Browning as a Scientific Poet." The paper opened with an exhaustive argument to prove that the progress of science need not, as some had said, tend to the destruction of the poetic art; that, in fact, some of the greatest poets had enriched their verse by the study of natural phenomena—Lucretius, Haller, Milton, and Goethe, and in our own times Tennyson and Browning, while students of natural and physical science had not found their exact acquaintance with natural laws impede the luxuriant growth of their poetic fancy. In fact, to interpret Nature faithfully, she must be approached by a mind neither wholly scientific to the exclusion of reverence, nor wholly poetic to the exclusion of knowledge. Many of Browning's most beautiful similes were the result of his intimate acquaintance with anatomy, physiology, and chemistry; and the use he constantly makes of figures drawn from the science of optics has enabled him to illustrate his favourite optimism by much beautiful imagery. Tyndall claims for the scientist that "his imagination does not sever itself from the world of facts," and the poet of the future will be denied the former "power of dealing capriciously with facts," but this, Mr. Berdoe argued, would not oppose the [illegible] spirit. In the poem "Easter Day" Browning seemed to have anticipated by five years Herbert Spencer's theories of the evolution of the first rudiments of nerves in Medusæ along the lines of least resistance, as the following lines seem to show:—

> "Thy choice was earth; thou didst attest
> 'Twas fitter spirit should subserve
> The flesh, than flesh refine to nerve
> Beneath the spirit's play."

Tyndall's suggestion, that two-thirds of the rays of the sun fail to arouse in the eye the sense of vision because of its present imperfection, affords Browning, in "Jochanan Hakkadosh," an argument against the assumption that our reason is sufficient for the complete comprehension of the great problems of life, the soul, and God. Browning's splendid rehabilitation of the character of Paracelsus should earn him the gratitude of the medical profession. The poem may fitly be called the "Epic of the Healer." He speaks as lovingly of the human hand as Sir Charles Bell, and rebukes those who refuse belief in God because they cannot find Him with their microscope and scalpel:

> "The name comes close behind a stomach cyst;
> The small becomes the dreadful and immense."

"You cannot find soul?" he asks. "Show me an atom! You cannot believe in immortality? But an atom is immortal! You want scientific faith? It is absurd—would not be faith. Do you understand gravitation? The exhausted air-bell of the critic leaves no air to poison, and none to breathe." His Göttingen Professor, in "Easter Day," reduced the Pearl of Great Price to powder for purposes of analysis. Sweep it, then, to the dust-hole? No! religiously preserve the remains! This is what modern Agnosticism and Comtism is doing with Christianity.

Mr. Berdoe, in conclusion, claimed for Mr. Browning that he is essentially the poet for the scientific man; abreast of the highest culture of his time, in close touch with the great aims of science, he knows its limits, and tells us we may

> "Confidently lay to heart, and lock in head our life long this—
> He there, with the brand flamboyant, broad o'er night's forlorn abyss;
> Crowned by prose and verse; and wielding, with Wit's bauble learning's
> rod.
> Well? Why, he at least believed in Soul, was very sure of God!"

THE UNIVERSITY OF DURHAM.

To the Editor of THE LANCET.

SIR,—May I be allowed to make one or two corrections in regard to the notice of the Durham University given by your Northern Counties correspondent in your issue of the present week? 1. No alteration has been made in the regulations which have for several years been in force with respect to the Preliminary Arts Examination. 2. No alteration has been made in the regulations affecting candidates for the Final Examinations for the degrees in Medicine, nor in those which concern the one year's "residence," or attendance on lectures and hospital practice. 3. The curriculum, &c., for the licence in Medicine have for many years past been identical with those for the degrees in Medicine; thus the licence has for a long time been merged in the degree, in fact, since the necessity for the possession of an Arts degree, or its equivalent, by candidates for the degrees in Medicine has been done away with. 4. The alterations which were made in Convocation (not "convention") in the University on April 11th consist in a rearrangement of the subjects of the earlier portion of the curriculum, and are briefly as follows, viz.: (a) Instead of a single First M.B. Examination in Anatomy, Physiology, Chemistry, and Botany, there will be two examinations, the first including Elementary Anatomy and Physiology, Chemistry, Chemical Physics, and Botany; the second (intermediate) including Anatomy, Physiology, Materia Medica, and Pharmacy (the last two subjects being removed from the Final Examination altogether). (b) The First Examination of the Conjoint Board in England of the Royal Colleges of Physicians and Surgeons will be accepted in lieu of the First Examination of this University, except in regard to Chemistry; and the First and Second Examinations of this University will be accepted by the Conjoint Board in place of the First and Second Examinations of the Boards. These are the only alterations which have been made. I am, Sir, yours faithfully,

LUKE ARMSTRONG, M.D.,
Registrar of the University of Durham
College of Medicine.

University of Durham College of Medicine,
Newcastle-on-Tyne, April 28th, 1885.

THE LANCET.

LONDON: SATURDAY, MAY 2, 1885.

The meeting of the General Medical Council approaches, and is likely to be one of more than usual importance to medical students of the future. There is one consideration which may tend to liberate the Council in its discussion of proposed alterations in its Recommendations, whether as regards Preliminary Education or the Final Examination of medical students—namely, this: the supply of medical students is so ample, so much in excess of what is required to meet vacancies in the profession, that the regulations affecting both education and examination will bear to be much strengthened before any risk is run of starving the profession or leaving the public in that plight feared by Sir Lyon Playfair, when the sick will not be able to have a physician on account of the scarcity of that craft. We have before us the Medical Students' Register for 1885, and amongst its multifarious contents of interest to those concerned in medical education is a table giving the number of medical students registered last year, and for every preceding year since, and inclusive of, 1864. We may explain, for the benefit of our older readers, that no medical student can be registered as such until he has passed a Preliminary Examination, as required by the General Medical Council, and has produced evidence that he has commenced medical study. The numbers, therefore, which we are about to give are of those who have succeeded in passing one of the Preliminary Examinations of the fifty or sixty bodies recognised by the General Medical Council. We may remind our readers that the natural waste of the profession by death is under 600. If to this we add another hundred as representing those whose deaths have not been reported to the Registrar, or who, not having died, have retired or in some way dropped out of the Register, we may have some idea of the numbers required to keep up the present supply of medical men.

The number of medical students registered in 1884 was 1957, as against 1783 in 1883, and 1862 in 1882. If we divide the period of twenty years into four periods of five years each, we get the following as the average number of medical students annually beginning their curriculum: From 1865 to 1869 inclusive there was an annual registration of 908 students; from 1870 to 1874 inclusive, of 1263 students; from 1875 to 1879 inclusive, of 1643; from 1880 to 1884 inclusive, of 1975. Thus it appears that there is an increasing rush towards the medical profession. The rush is not quite steady and regular. Three or four years ago the annual number for two or three years was a little more than it was last year. But, dividing the periods quinquennially, it is clear that a great increasing number of youths look towards the profession as a calling. No doubt many of them never succeed in getting a qualification. From failure in examinations or in fortune, from defective ability, or, much more commonly, defective industry, they do not reach the goal for which they set out, and they either fall out of the profession altogether, or hang on to its skirts in the unsatisfactory form of unqualified assistants. The point of this interesting table, carefully made up by Mr. Miller, is that the Council has 1975 students a year to legislate for, and that it does not need half that number of students to be qualified annually in order to keep up the waste of the profession. We do not approve of the favourite pastime of the Council—that of always considering and altering the regulations of preliminary and medical education. It is exceedingly harassing to students and inconvenient to schools and teachers of medicine. Moreover, it does not tend to raise the Council in the respect of either students or teachers. But as there seems an intention to deal at the approaching meeting in some radical and serious way with fundamental principles in regard to preliminary and medical education, it is well to know that without any risk both the preliminary and final tests can be made more severe. If men are to be arrested in the process of entering the profession, the sooner the better. "Had it been early, it had been kind," might many a man say who is allowed to advance only so far in a medical career as to discover his unfitness and incompetency when it is too late. If the preliminary tests were of a thoroughly satisfactory kind they would tend greatly to diminish the subsequent rejections. We repeat, if a man is to be rejected, the sooner the better, and better in the preliminary stages than in the advanced ones. There is so much competition nowadays for students, such a rivalry of schools and examining boards, that there is constant danger of the Medical Council, in which school and examining board "interests" are so excessively represented, forgetting the great interests of the public and of the profession. We have shown by the Students' Register that there is no excuse for laxness of examinations on the score of defective supply of students, but, on the contrary, every encouragement to carry higher the standard of preliminary and medical education.

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It is much to be regretted that the Earl of Shaftesbury, whose name can never be mentioned in connexion with lunacy without the highest respect, has not found it possible to accept the principle of magisterial authority for the incarceration of a "lunatic" in an asylum, and rather than do so has resigned his position as Chairman of the Board of Commissioners. We attach the greatest moment to this new mode of procedure, and believe it will be found to afford a better safeguard against abuses than even its promoters anticipate. Altogether the Bill before the Lords is an admirable measure. The Earl of Milltown, who has already done so much real service in this matter, and to whose efforts we mainly owe the fact that the subject has been seriously taken in hand by the Government, did not speak too warmly when he complimented the Lord Chancellor on "the ample way in which he had fulfilled the promise he had made last session." If the Earl of Selborne will only consent to modify a few of the minor points in the scheme as drawn—for example, shortening the period during which an alleged lunatic may be confined on an emergency certificate, and compelling the Commissioners to carry out their examination *before* they chance to find it "convenient" to do so, the reform effected will be such as to render the law of lunacy in the main satisfactory. As to the private asylums, we think matters will adjust themselves before long. Those houses which are actually needed will be maintained; but the provision made by the county authorities will soon be sufficiently great to meet all ordinary demands, and the cheaper sort of "licensed house" will cease to be a profitable speculation. It is a most satisfactory feature of the reform to be effected by this Bill, that committees of public asylums will be able to ease the burden on the ratepayers by receiving private patients. This provision will tend greatly to encourage the gradual replacement of private by public asylums, which is so much desired. At the same time, it must not be forgotten by the Lord Chancellor, and we are sure the Earl of MILLTOWN will not lose sight of the fact, that as soon as they begin to take in paying patients, the committees of public asylums will themselves become "keepers of private asylums." This is a very important consideration. It must not be assumed that committees are immaculate. At this moment some of the larger private asylums are managed by committees composed of men whose social position is such as to inspire the highest confidence, and yet, in spite of this, the allegations of undue detention in these very asylums are fully as many and as damaging as any which have been brought against the proprietors of the smaller licensed houses. We are not making this statement without reason. It follows that the provisions of the Bill should be strengthened in regard to the reception of lunatics under emergency certificates. It was stated in evidence before the Select Committee of 1876, and we are still prepared to maintain the statement then made, that even forty-eight hours in a lunatic asylum may suffice to convert excitement in a neurotic subject into actual mental derangement which may afterwards resist all remedial efforts. Therefore we contend that the folly of allowing a patient to remain a month or more, or even *seven* days, without examination by a competent and impartial authority stands confessed on the face of the proposal. The next stage of the Bill is fixed for a fortnight hence. Let us hope that in the meanwhile the Lord Chancellor will see the wisdom of amending the faulty details of a measure which in principle, and as far as it goes, is as satisfactory as could be expected or desired.

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OUR readers are well aware of two things in reference to medical education in the United States. First, that it has hitherto been conducted on very free and easy principles, and, secondly, that earnest efforts are being made by good men and true in all the States to abate the scandals of medical education, and to bring it under some public and responsible authorities comparable with those which regulate it in all other civilised communities. An instructive prospectus on this subject has just been issued by the Illinois State Board of Health, with the help of which we shall try to elucidate for the benefit of our readers the real condition of things in the States, not so much with the view of finding fault as of supporting and helping those who endeavour to bring about a better state of things. The Illinois Board of Health proceeds under an act of the State called the Medical Practice Act, and publishes a schedule of minimum requirements. Diplomas from colleges which give evidence of an actual and *bona fide* compliance with this schedule are accepted unconditionally. Diplomas from those which do not are required to be supplemented by an examination before the Board on the branches or subjects of the schedule omitted by the colleges in question. The schedule requires—1. Certificates of moral standing. Diplomas of graduation from a good literary and scientific college or high school; failing this, a thorough examination must be passed in mathematics, English composition, and elementary physics or natural philosophy. 2. Instruction in ten subjects or branches of medical science. 3. The length of regular or graduating courses or sessions to be five months, or twenty weeks, each; and two full courses of lectures, not within one and the same year, are required for graduation with the degree of Doctor of Medicine. 4. Regular examinations are to be made by each lecturer daily, or twice a week at least, and final examinations, where practicable, by competent examiners other than the professors in each branch. 5. Dissections and hospital practice during two terms. 6. The time of professional studies to be not less than three full years before graduation. 7. Each college must show that it has a sufficient and competent corps of instructors and facilities for teaching.

Such is the standard of medical education in one of the States which have confided the regulation of medical study to a Board of Health. It will not be thought exacting in its demands. But of 47 colleges which have claimed to have their diplomas recognised by the Board, only 26 were found to have regulations satisfying its requirements. The state of medical education in the United States is one of the illustrations of the disadvantage of a strong central government. Each State is a law to itself, and in many States it seems possible for any group of needy or adventurous physicians to form themselves into a medical school—otherwise a diploma-mill. The extent to which this evil has attained may be gathered from the fact that a total of 234 different medical institutions are given in a list in this pamphlet, dating from the year 1765. There are now in existence no less than 128 such bodies. Excluding 12 in Canada, there remain 116 in the United States, which for 38 States gives 3 per State. Among the extinct schools there are 54 out of 153 regular, 7 out of 20 homœopathic, 12 out of 24 eclectic, and 6 out of 10 physio-medical and miscellaneous. Out of 18 fraudulent institutes, 17 happily are now extinct. The "Boston Bellevue" is the only one of this class remaining. These figures are very significant. They show the mushroom-like growth and death of these "colleges." The harm done by them is incalculable. The competition engendered makes it very difficult for the more organised and recognised schools to maintain a high standard. The most absurd particulars are given of the devices resorted to for catching students. Personal solicitations, low fees or no fees, and the certainty that a diploma may be obtained on a minimum of knowledge and education, general or medical, are all enlisted. We are threatened in this country with a form of Parliamentary government where freedom may be prized above knowledge and efficiency; but we have not yet reached this depth, and we can only wish our American friends a speedy curtailment of that form of liberty which permits the creation of an indefinite number of schools to issue diplomas legalising the ignorant practice of an art in which a little knowledge is verily a dangerous thing. There is some hope of this consummation on two grounds. First, the public is deeply interested in the suppression of mere diploma-mills, and in the quality of work done at medical schools; and, secondly, the evil now felt by the medical profession was formerly rampant in the legal profession in New York. Idle and incompetent young men were admitted to the bar in excess of legal business and the legitimate increase of the profession. The Higher Courts took measures to restrict the supply, and ordered that only graduates of certain specified law schools should be eligible for examination after a certain date. The other law schools closed their doors. The profession upheld the courts, and the end was gained. Let medicine take a hint from law. It is only fair to say that there are signs of improvement in the standard and methods of medical education in the States, of which the following are the most important: 102 colleges now exact a matriculation examination, as against 45 in the first Conspectus of the Board of Health; more colleges are requiring longer courses of lectures, and making provision for what are called "graded" courses—i.e., courses which are not mere repetitions of previous courses, but developments of them. We must leave this subject with every expression of sympathy with those who are seeking to abolish fraudulent medical schools and diplomas.

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Some incidental remarks made at a recent meeting of the Pathological Society revealed the existence of the first genuine instance of Actinomycosis in this country. The case occurred, we believe, in the practice of Dr. Harley at St. Thomas's Hospital, the post-mortem examination being made by Dr. Sharkey, and the microscopical examination by Mr. S. G. Shattock, curator of the museum. As the disease in man has only been recognised within the past decade, and as no cases have hitherto been recorded in this country, it is not surprising that but few members of the profession in England should be acquainted with it. A valuable clinical contribution to our knowledge of the affection in man has recently appeared from the pen of Dr. J. Israel.[1] In 1882 Professor Ponfick published an almost exhaustive monograph on the disease, in which most of the facts then known were embodied. From questions which have been addressed to us, we believe that a brief account of the elemental features of the affection will be welcomed by the majority of the profession, to whom the malady is unknown.

The affection is presumably one which is dependent on the presence and activity of a micro-organism. The microparasite is a member of the fungoid class, and consists chiefly of a mycelium which divides in a dichotomous fashion, and gives rise by its spread from a centre to a radiate appearance, whence its name—actinomyces—is derived. The circumferential ends of the mycelial sprouts have a flask-shaped swelling. The little masses of felted mycelium may be recognised by the naked eye as sulphur-yellow bodies of about the size of a hemp-seed. The disease which this parasite is supposed to cause may develop in many parts of the body. The most common site appears to be the jaw and parts bounding the mouth. The affection in animals has long been known in this situation under various names, and has been regarded as a form of scrofula and as a new growth. It is believed that the parasite gains an entrance through the medium of a carious tooth or some wound of the gum leading to the jaw-bone. There is but little to be said of the morbid anatomy of the disease. A swelling forms in the jaw, and gradually increases in size. This tumour in its earliest stages may be punctured without any matter being let out, although it generally has an elastic and semi-fluctuating consistence. A section made into a tumour in the early stage of its existence shows a reddish-white area sprinkled in places with gold-coloured granules. Later on abscesses and fistulæ form, in the discharge from which the sulphur-coloured bodies may be seen. Broadly speaking, the tissue of the morbid new growth, which must be regarded as inflammatory rather than sarcomatous, has very much the characters of ordinary granulation tissue. Actinomycosis may occur primarily in the respiratory tract proper, and Dr. Israel makes this class of cases his second group. He narrates a case in which the disease was localised to the bronchial mucous membrane. The patient was a girl aged fifteen, who suffered from the signs and symptoms of chronic bronchitis, with fetid expectoration, in which the actinomyces were readily discovered. Another case of a man, aged twenty, is given, in which the primary localisation of the disease was in the parenchyma of the lung; it was afterwards propagated to the pleura and to the prævertebral tissues. Some of the cases have many of the clinical characters of empyema with discharging sinuses, and in such cases a complex system of fistulæ not unfrequently undermines the morbid tissues. The structures in the posterior mediastinum and prævertebral regions are often affected, and the bodies of the vertebræ may become carious. Dr. Israel makes his third group of cases include those in which the disease begins primarily in the intestinal canal. In some of the cases the foci of the disease are widely disseminated. The liver, spleen, muscles of the back, and muscular substance of the heart have been shown on post-mortem examination to have numerous centres of actinomycosis. Large abscess cavities may form behind the peritoneum as well as behind the pleura, and these may communicate by many perforations of the diaphragm. The symptoms necessarily depend chiefly on the localisations of the disease as well as on its rate of progress, and present therefore extremely varied clinical pictures. Dr. Israel's work contains an account of thirty-eight cases, which number includes all that have hitherto been recorded.

A meeting of graduates of the Royal University of Ireland, including members of the Parliamentary Committee of the Senate and of the Council of the Graduates' Association, was held last week in the Westminster Palace Hotel, presided over by Sir William Mac Cormac. It was resolved that steps should be taken to press the claim of the University to Parliamentary representation, and a special committee was appointed to carry out the necessary arrangements. This committee will include Sir William Mac Cormac, and Drs. Knight, Jones, Purcell, MacKellan, Henry, Huggard, and Wheeler.

Dr. Mapother has resigned his seat on the Council of the Royal College of Surgeons, Ireland, and most probably will be succeeded by Dr. Hamilton.

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[1] Klinische Beiträge zur Kenntniss der Actinomycose des Menschen. Berlin: A. Hirschwald.

Annotations.

"Ne quid nimis."

THE WAR IN THE SOUDAN.

THE experiences of our war correspondent in the Soudan will, we are sure, be read with much interest. They give a graphic description of the arrangements at the base for the sick and wounded of our troops, and furnish most gratifying testimony to the care which has been bestowed in making them, and to the intelligence and zeal with which they have been carried out. There were but two matters which did not seem to have been satisfactorily arranged, and, if we mistake not, for neither of these could the officers of the medical staff be deemed responsible. The first was the position of the burial-ground, which was very badly chosen, but after it was found to be a nuisance to the hospital ships it was closed and a new site selected. The other was the repetition of one of the great causes of complaint in the Crimea: the mixing up of the medical stores and hospital equipments with other goods, instead of having them either sent in a vessel specially retained for the purpose, or, at least, having them carefully separated when landed and arranged so as to be easily found when required. Our correspondent bears strong testimony to the admirable manner in which the officers of the medical staff have discharged their duties in the field, as witnessed by him in the disastrous affair of the 22nd of March, when the military commander allowed himself to be surprised, and to the very efficient arrangements for the treatment of the cases in the hospitals at the base. But he sounds a note of alarm on a subject to which we have already called attention the great risk to be incurred if the troops are kept in the Soudan during the ensuing months of intense heat. Not only is there the probability of a great number of cases of heat apoplexy and of dysentery, but there is the certainty of exhaustion of the vital powers through loss of appetite and deprivation of sleep, which must inevitably destroy the efficiency of the men. The subject is one which calls for the most anxious consideration of the military authorities, and for immediate action if anything is to be done to avert such a deplorable prospect. If any delay occur in coming to a decision on this point, we fear that the ultimate measures will be found to be "too late," as has already been so often the case in the conduct of this miserable expedition.

THE NATIONAL AID SOCIETY.

ATTENTION has lately been called in the daily papers to the proceedings of the National Aid Society in connexion with the campaign in the Soudan. There probably never was an army sent from this country so fully supplied with everything necessary for the treatment of the sick and wounded as the one now serving in the Soudan; nor was there ever one in which the arrangements for that purpose were so successfully carried out. There has been but one opinion expressed by those cognisant of the facts, and competent to judge of the results, and that is, that the work of the medical service in this campaign has been excellently performed, and that the wants of the sick and wounded have been abundantly supplied and their comforts fully attended to. Under these circumstances, it is difficult to understand on what plea the very considerable expenses incurred by the National Aid Society can be justified. The Government has provided most amply both a complete staff of medical officers, nurses, and orderlies, and an ample supply of the necessary medicines and medical comforts. To supplement these by private means is like carrying coals to Newcastle; and if a statement were published of the articles sent out by the Society, we have a strong suspicion they would be found to consist to a great extent of luxuries which it is simply absurd to provide for the class to whom they have been sent. The manner in which this Society keeps itself before the public in the columns of the newspapers would, if followed by any professional person, be put down as quackery of the most intolerable kind, and it is painful to witness the efforts made to gain notoriety for its leaders. If, instead of profuse expenditure in providing luxuries when they are not required, and when the needful comforts are already abundantly supplied by Government, the National Aid Society would turn its attention to the wants of the wives and children left at home, and to the assistance and comfort of the widows and orphans of those who have fallen in the unhappy and mismanaged conflict in the Soudan, they would be doing a work of kindness and charity which would redound to their credit, though perhaps it might not afford so good an opportunity of self-gratulation as the course now pursued. It is alleged in some of the papers that the Society has a large sum of money at its command, and that it has not published any statement of its accounts since 1871. We know not whether this be correct or not, but, if so, we think one of the first acts of Sir R. Loyd Lindsay should be to give an account of his stewardship, to show how much he has spent, how he has spent it, and to justify the course which has been adopted by the Society in supplementing a service which was already quite equal to the requirements. In our opinion it has done serious mischief in shaking the confidence of the soldier in those to whom he is entrusted, and in generating a desire—may we not say a demand—for things which are not only unnecessary but often injurious. We are most reluctant to place any difficulties in the way of showing kindness to our soldiers, but we think far more good could be done by making provision for their families and for those left behind, than in parading great preparations to supply artificial wants rose-water and eau-de-Cologne and blowing loud in the streets the trumpets of the leaders of this quasi-benevolent Society.

CREMATION UNNECESSARY AND INJUDICIOUS.

A PAPER read by Sir Spencer Wells at the Parkes Museum has brought again before the public eye the long train of arguments for and against cremation and burial, which we have shortly sketched in former articles upon this question. Some would tell us that there is no longer any question as to the preference to be accorded to urn-burial. Despite the tendency of the late discussion, which was so far an apparent success for the advocates of the newer method that it was almost entirely one-sided, we venture to think that there is still room for much difference of opinion. On sanitary grounds, we can well see how objection may be raised to the continuance of a custom even so long approved, when ignorant malpractice or gross neglect of natural methods have turned the earth of the graveyard into a reeking pit of huddled corpses. Sir Spencer Wells makes much in his paper of certain spots of this kind discovered in Ireland. He regards as impracticable the scheme of the Local Government Board for the better laying out of cemeteries; and he places in contrast with the foulness of ill-conducted burials the refined and classic purity of cinerary urns. These comparisons are within the usual limits of persuasion, but it does not follow that they present equally to the mind both sides of the question at issue. We do not think that the abuse of burial in the earth justifies its abolition, any more than the Indian suttee represents or bans the practice of cremation. It is easy to bury decently, and yet to bring the human clay to earth in a more than figurative sense. If this were done, as it may and ought to be, no objection which is not purely theoretical and unproved could be urged against it. Decomposition would be allowed and aided, and all communication between the areas of burial and those inhabited by the living could be prevented by appropriate drainage and isolation of soil. The rule and habit of Nature, by which she constantly and faultlessly removes and uses all dead creatures not consumed as food—namely, absolute surrender to the elements—would suffer no further change than that of somewhat retarded action, a change which frequently marks without marring her efforts in this direction. It is idle, therefore, to talk of so many million corpses having to be strewn over the country in a single generation. Long before the end of half that term the buried dead, if not pulverised by decay, would have ceased to yield sustenance to the germs of mortal change. The medico-legal aspect of cremation has been so often discussed that little remains to be said about it. The recent combustion of a body at Woking, it is important to note, was preceded by an autopsy. The necessity for this precaution, and the further analyses to which it may give rise, are not likely to weigh greatly as objections with those who contemplate the future incineration of their bodies. Post-mortem examination offers but trifling violence to the person in comparison with the fire of the crematorium. However this may be, it is clear to our minds that no less decisive measure can compensate the criminal law for the loss of the evidence of fact which it must otherwise occasionally sustain in the total destruction of the dead by fire.

BULLYING AT SCHOOL.

The death of a little boy, aged twelve years, through injuries received from blows on the spine from a dozen or so of the bigger pupils at King's College, has led to an inquest, with a verdict of "Death by misadventure," the jury adding the following rider: "That the attention of the authorities at King's College should be called to the evident want of supervision over boys during the interval of school hours, which, in the opinion of the jury, led to the death of Charles Fisher Bourdas." The coroner, in summing up, strongly deprecated the rough play that prevails in almost all schools. We have good reason for stating that the cruelty of bigger boys to little boys is not confined to "rough play," but that a system of bullying prevails out of class hours, of which the masters at schools are as ignorant as the head master of King's College, in his evidence, admitted himself to be of the cruel practices of his own pupils. When the work of the class is over the form master turns his pupils loose, and considers his responsibility at an end. There is always a strong resistance exhibited by the form master against an attempt on the part of the head master or the governing authority to impose on him any responsibility for the conduct of his pupils out of class. Indeed, the governing authority of a school is a nonentity in matters of discipline, and it rests with the head master to make the best arrangement he can for the good conduct of his pupils in the intervals of class. As a rule this duty is imposed on the senior boys or prefects of the school. The head master, as well as assistant masters, usually, are intentionally ignorant of the methods adopted by the elder boys of the school to maintain, out of class, discipline among the younger pupils. The strictest secrecy is preserved, and no point of schoolboy honour is more rigidly maintained than the principle of not "splitting" either to masters or friends. In fact, so rigidly is this observed among most schoolboys that if masters institute an inquiry the schoolboy code of honour not only justifies him in suppressing the truth, but even in telling a lie to screen his school companions. It is, therefore, exceedingly difficult for the head master to become acquainted with the practices of his school, and the ignorance displayed by the head master of King's College in this respect is no more than prevails among all head masters. This, nevertheless, is no justification of the grave defects of discipline which lead to cruelty and oppression of the weaker and younger boys. Something more is wanted than mere prefectorial supervision, the authority of which has to be maintained by harsh and unfeeling treatment, accompanied often by cruel blows and kicks, or, as at one of our public schools, by "bending" a lithe ground ash stick across the back of the poor little culprit.

THE CUSTODY OF LUNATICS.

"Let the authorities get out of the difficulty as best they may." This is our advice to the medical officers of workhouses, and, so far as we have any influence with masters, to those officials also. It has long been a most mischievous practice to send suspected lunatics to workhouses, and to remand persons brought before magistrates to the same institutions on suspicion of insanity. A workhouse is not the place for such cases. As a matter of fact, a prison is better, if no more suitable place of observation can be found. The only right way out of the difficulty is to provide reception and probation wards in connexion with the public asylums for lunatics. This should be done at once, as we long ago suggested. We are not disposed to yield an inch of the ground we have taken up in regard to this matter, and we think it will be much to be regretted if the Local Government Board should give way under the pressure brought to bear upon it. The judge was right, the stipendiaries are wrong, and it is unfortunate that we have not a Home Secretary with sufficient strength of purpose to maintain the authority of the judicial opinion expressed.

THE PERILS OF FOOTBALL.

Now that the football season has come to an end, a timely opportunity occurs of drawing attention to the exceptional amount of danger run by the votaries of a much-abused (in every sense of the word) form of amusement and exercise. Since October last we have taken the trouble to cut out the record of each case of accident at football that we have met with in the papers, without, be it noted, any special search for them. The following is the result:—Oct. 10th: At Eton, Mr. W. J. C. "had his right leg broken by a cross kick."—24th: Mr. C., a student of St. Augustine's Missionary College, Canterbury, "had his leg broken."—25th: W. M'G., "while engaged in a match, was kicked in the stomach, but, feeling better afterwards, he finished the game. He died some time afterwards from internal injuries."—29th: Mr. W. P. G. "had his collar-bone broken."—Nov. 17th: W. A. "had his leg badly broken below the knee."—Dec. 1st: Mr. H. W. P.'s "left leg was broken clean through."—6th: Mr. E. G. B. "received a severe kick on his left leg, by which two bones were broken just above the ankle-joint."—13th: Mr. H. H. G., a well-known athlete, sustained an injury to his right ankle which, in sporting parlance, "effectually put a stopper on his engaging in those pursuits of which he was such a rattling exponent." On the same day, in one match, two players received injuries which compelled their retirement; in another the captain of one of the teams had his leg broken; in a third a fracture of the collar-bone occurred (in this last it is added, "the play is described as having been rough"); in a fourth, "one of the Flint men had his collar-bone broken through being violently charged by one of the opposing team."—16th: A broken leg.—22nd: Broken collar-bone.—27th: Broken leg and severe internal injuries.—29th: Fracture of right leg just above the ankle.—Jan. 5th: H. L. "received a violent kick in the stomach, which completely prostrated him and caused him intense n"; he died two days later from his injuries.—19th: A ayer "received serious internal injuries."—Feb. 2nd: Case f fracture of collar-bone.—9th: Two cases of fracture of ollar-bone and one of fibula.—March 9th: W. "had his ankle-bone completely broken by a kick."—30th: T. S. "was accidentally kicked in the face; his lips, nose, and cheek were cut, and he was removed to a hospital."—April 4th: Broken leg.—13th: Broken arm. In this case "the game is said to have been characterised by a good deal of rough play." This list, which of course in no way represents the total amount of the season's football casualties, amply suffices to recall attention to the exceptionally dangerous nature of the game. No other popular game with which we are acquainted has the same amount of peril attached to it. It may be urged that accidents are bound to occur in all sorts and kinds of amusement, and that hunting is responsible for even worse and more frequent accidents than football; this may be so, but hunting is free from the objectionable element of personal conflict which pervades football. The game requires reform; we say *reform*, because we think it would be unwise, and on the whole undesirable, to follow a recent American proposal, and demand its prohibition in our schools. To put a stop altogether to the principal winter amusement of thousands of young people would, we are sure, be impossible. Nor is it needed; for football, under such restrictions as would reduce the number and severity of these frequent accidents, is capable of far more good than harm. What those restrictions should be is not for us to decide, but we would venture to call the attention of the Rugby Union and the Association authorities to "collaring" and "charging" respectively. Reform there must be, for the game is still only too well described by an old writer as "a friendlie kind of fight rather than a play or recreation—a bloody and murthering practise than a felowly sporte or pastime."

SANITARY PROGRESS IN COVENTRY.

Dr. Fenton's annual report for 1884 refers to the circumstance that his appointment has recently been made under the order of the Local Government Board. The occasion is opportune for giving a summary of the history of sanitary work in the borough during recent years. When the appointment of an officer of health was made in 1874 it was somewhat tentative in character. No means then existed for dealing with infectious diseases, some 2000 old-fashioned middens existed, well water liable to pollution by soakage of filth was somewhat extensively in use, the town water was in part derived from a stream which received sewage, and there was generally much carelessness and ignorance in sanitary matters. At the present date matters stand on a very different footing. Scavenging is done efficiently by the corporation officers, and it is in contemplation to erect a destructor; the offensive middens are largely done away with, only 200 of these structures remaining; the local wells have been, and are still being, closed; and the town water, which has been freed from the risk of contamination at its source, is replacing the former supply. Further, excellent hospital accommodation has been provided for cases of infectious diseases. First, a temporary iron structure was erected, and this, coupled with a voluntary system of notification, materially aided the authority in staying the spread of infectious diseases. Now, however, a modern hospital of two pavilions, with all needed administrative buildings, and a Ransome disinfecting stove, are available for the purposes of the urban district. Some practical outcome of this action may naturally be looked for, and it is forthcoming. In the five years preceding 1874, when the medical officer of health was first appointed, the annual death-rate from all causes and that from the seven principal zymotic diseases stood at [illegible] and [illegible] per 1000 respectively. In the five years ending 1884 the respective rates were 18·7 and 2·1—figures which indicate a large saving of valuable lives. In some towns officers of health were appointed, under statute, with much reluctance. Whatever may have been the case in Coventry, the authority of that town have now recognised the value of Dr. Fenton's work, and have, as the result of his efficient labours, placed his appointment on a higher and more satisfactory footing.

HEALTH OF THE POLICE.

The Report on the Health of the Metropolitan Police for the year 1884 has just been issued by the chief surgeon, Mr. T. Holmes. The force numbers over 13,000 men. The daily average loss on the whole force by sickness was 2·93, which is nearly identical with the previous year's rate. The total injuries were 1129—727 "on duty," 230 "not on duty," and 172 sore feet. The ratio of these to the total number of men is about the same as the year before. The diseases of exposure, chronic and muscular rheumatism, coryza, bronchitis, and tonsillitis, were 874, 631, 461, and 1007 in the four quarters of the year respectively; making a total of 2973, which is rather less, both absolutely and relatively, than in 1883. For venereal disease 22 were suspended, 14 of these being sent to the Lock Hospital. During the year there were only 6 cases of small-pox, 2 of which were doubtful or "modified"; all were slight. One hundred and sixty-four men were admitted into hospitals; these were chiefly distributed amongst St. George's, Westminster, St. Bartholomew's, Guy's, University College, the London Fever, and the Lock; besides which twenty-six men of the outlying dockyard divisions were admitted into naval hospitals. The number of deaths in the Town and Woolwich divisions was 47, of which 15 were referred to consumption and "disease of lungs," 4 to pneumonia and pleurisy, 4 to bronchitis, 3 to rheumatic fever, 3 each to apoplexy and heart-disease, 2 each to typhoid, erysipelas, acute nephritis, and diabetes, and 1 each to scarlet fever, pyæmia, tumour of brain, phlebitis, psoas abscess, cancer, and drowning. Besides those who died, 223 were removed from unfitness through age or disease.

EPIDEMIC OF MEASLES IN GUERNSEY.

A widespread epidemic of measles occurred in the Island of Guernsey during the last quarter of 1884, and it is the subject of a paper by Dr. J. Aikman in the *Glasgow Medical Journal*. The disease appears to have been imported from Jersey, to have been nurtured among the parish patients in the north district until it gathered epidemic force, and then to have spread to all classes of the population. It is explained that there are no data upon which to base any statistics with regard to the extent of the epidemic, but the local papers stated that there had been from 3000 to 4000 cases, in a population of some 30,000. Guernsey has been so free from epidemics for the past thirty-five years that it has been thought by some that local insanitary conditions must have been the cause of so exceptional a prevalence. The situation of its principal town on the slope of a hill, permitting the fresh aeration of even its narrowest streets by means of the sea-breeze from the Channel, and a sub-soil of gravel and granite, afford natural conditions in favour of healthiness. But fault is found with the method of sewer ventilation; and house-drains are in this respect probably far more in fault. The water-supply is from public and private wells, many of which are in proximity to buildings and are liable to accidental contamination. It is always difficult to determine how far measles is associated in its spread with faulty sanitary circumstances, and the fact that Guernsey had long been free from it, supplies an explanation of the extent of the epidemic by reason of the number of children and young persons who would have been susceptible to its influence. But whatever conclusion may be arrived at on this point, it is certain that the sanitary conditions to which we have adverted, and which are a blot on the reputation of a charming pleasure and health resort, should be at once remedied. We are glad to learn that a scheme is already on foot for supplying the town with a water which shall be free from suspicion.

THE APOTHECARY, ANCIENT AND MODERN.

THE peculiar position in which the Society of Apothecaries of the City of London has been placed by threatened legislation and by the new regulations of the Medical Council, has induced Dr. Corfe, the present Master, to sketch briefly the history of the Society, from the time of its foundation to the present time. Commencing with a cursory review of the rise and varied conditions of the body of men styled "apothecaries" during seven centuries (1180 to 1880), Dr. Corfe glances at the four stages of their history—viz., 1st, as Pepperers, of Soper's-lane, or Easterling's, trading with Egypt, Arabia, India, through Constantinople; 2nd, as a class becoming incorporated with the Company of the Grocers, but retaining their special title of apothecaries, and practising as such; 3rd, the disseverance of the fraternity from this company, and the establishment by Royal Charter of the present Society as an independent body; and lastly, the acquisition, by the Act of 1815, of the privilege of constituting itself as a Society for educational, examining, and licensing purposes. The remainder of the book is occupied with an account of the nature of the examination for the licence, a description of the hall and the articles of interest in it, a chronological glossary, and a list of eminent men who have been directly or indirectly connected with the Society. The work is intended, it is stated, to illustrate the facts—(1st) that the apothecary of the first and last portion of the nineteenth century is a coördinate practitioner with the same personage who carried on this profession in the twelfth century; and (2nd) that such persons were viewed as educated men, though traders. In another portion of the pamphlet, however, the author expresses the hope that he will be able to convince his readers of the great benefit which the Society has rendered to science, the advantages which it has conferred on the world at large, and the ability it still displays to carry on its functions for the good of mankind whilst it upholds its own reputation and the honour of the medical profession; and it may be fairly supposed that this is his main object.

ALLEGED CHOLERA VACCINATION.

CONSIDERABLE excitement has been aroused in Spain, both within and without scientific circles, upon the alleged discovery of protective inoculation for cholera; and we read that already numbers of people (300 according to one report) have submitted to inoculation with the choleraic "virus." In spite of the statements made by Dr. Ferrán (*vide* p. 489) we would venture to submit that the fact of such protective inoculation is by no means proved, if indeed it be capable of proof. For, so far as we know, cholera has never been transmitted by inoculation, and cannot therefore be placed on the same footing as small-pox, anthrax, and other diseases, in which the blood is apparently the seat of the organised virus. Nor can it be yet considered as determined that the microbe discovered by Koch is the specific cause of cholera. We have so recently heard this latter point discussed that there is no need to allude to it further; and it seems not only premature, but absolutely wrong, to promulgate the doctrine that cholera can be prevented by inoculation before these points are settled. The profession in Spain would do far more to protect their country from an epidemic if they urgently pressed on the authorities to undertake sanitary measures in the towns, than by lulling people into a fancied security by spreading the belief that inoculation will protect an individual from the disease. If cholera does visit Spain they will be wofully undeceived.

OVER-PRESSURE IN SCHOOLS.

DR. CRICHTON BROWNE'S letter in *The Times* a few days ago will be read with interest. He contends that the recent reduction in the rate of mortality among children, upon which Lord Aberdare laid great stress in his address at Manchester, is no proof of beneficial results from the effects of education; and he urges, on the other side, that disease and disturbance of the nervous system are increasingly frequent among the young. This is a fact which cannot be gainsaid. Headaches and nerve troubles of various descriptions are extremely prevalent, and we have no doubt that they are in great part the effects of brain work of a class and kind which is injurious to health, and will hereafter be found to be detrimental to progress. Mr. Mundella may try to sweep back the Atlantic with a broom, but, as Dr. Crichton Browne remarks, he must find better brooms than have yet been made available, Sir Lyon Playfair and Lord Aberdare not excepted.

VIRCHOW'S ARCHIV.

THE commencement of the one hundredth volume of the world-famous *Archiv für Pathologische Anatomie und Physiologie* is signalised by a few pages of retrospect by its illustrious editor, Professor Virchow. When he recalls the condition of medical science in 1847, the year of the first issue of the *Archiv*, and contrasts it with its position at the present day, he may well be pardoned any feelings of pride at the advances that have been made therein to which his *Archiv* has so remarkably contributed. He tells us that the enterprise undertaken by himself and B. Reinhardt was at the outset almost alone—at any rate in North Germany—in its object of promoting scientific research with direct application to medicine, and he pays a well-merited tribute to the encouragement and aid furnished by the publisher, G. Reimer, whose death at an advanced age occurred quite recently. The first numbers were almost solely composed of the contributions of the editors, and before the fourth volume was completed in 1852, the death of Reinhardt left Virchow alone in the editorial chair. But contributors were not lacking, and as years passed on they became so numerous that after the thirty-first volume (1864) the *Archiv* was issued monthly, forming three volumes a year; and in 1879 a further enlargement was found necessary, so that since that date four volumes have appeared annually. It would be quite possible to extend it still further, for the contributions are so numerous; but Virchow deprecates any further extension on the ground of cost. The statement speaks well for the great success and high reputation of the *Archiv*, which is read in all parts of the world. At first it was intended to confine its scope to subjects directly related to medicine; but it was soon found necessary to widen this area, with the result that its volumes contain much of the early work of anatomists, histologists, physiologists, and embyologists; and this in spite of the vast increase in scientific periodical literature that has taken place. In its pages may be found a complete history of the development of medical science; for it has fulfilled the object of its founders in making it a repertory of detailed observations to elucidate the problems of pathology. Prof. Virchow goes on to review this progress in one department with which his name is specially connected—viz., the application of the cell-doctrine of nutrition to morbid processes, and he clearly shows how the doctrine has been enlarged and elaborated in course of time. He alludes with sorrow to those amongst the contributors to the work who have since died, including Reinhardt, Leubuscher, Beckmann, Friedreich, Otto Weber, C. E. Hoffmann, Förster, Buhl, v. Wittich, Rudnew, Hüter, and Cohnheim, many of whom are famous in their writings, but whose earliest ideas found expression in the pages of the *Archiv*. Not a few of them were his own pupils, several were long engaged as his assistants, and in losing them he feels a pang as if a part of himself had been torn away. In a few words at the close of this article he expresses his confident belief that the work thus commenced will be carried on with the same earnestness and vigour, and that the history of the *Archiv* in the future will be as rich as it has been in the past. That it may be many years before it is deprived of the guidance of its founder is the earnest hope of all who reckon this as not the least of his many great achievements in the cause of science.

ASSOCIATION FOR PROMOTING A TEACHING UNIVERSITY FOR LONDON.

AN important Conference between the Executive Committee of the above Association and representatives of the London Medical Schools will take place at 4.30 P.M. on Monday next (May 4th), at the rooms of the Society of Arts. The following medical schools have chosen the gentlemen named to represent them upon this occasion:—St. Thomas's Hospital: Dr. Bristowe, Dr. Bernays, and Mr. Sydney Jones. Middlesex Hospital: Dr. Cayley and Dr. Coupland. St. Bartholomew's Hospital: Dr. Norman Moore, Dr. Dyce Duckworth, Dr. Russell, and Mr. Willett. University College Hospital: Dr. Barlow, Professor Schäfer, and Professor Berkeley Hill. King's College Hospital: Dr. Curnow, Professor Bentley, and Professor Gerald Yeo. St. Mary's Hospital: Dr. Sieveking. Westminster Hospital: Dr. De Havilland Hall and Mr. George Cowell. Guy's Hospital: Dr. Taylor, Dr. Stevenson, and Mr. Howse. London Hospital: Dr. Down and Mr. Treves. It is expected that the medical schools of St. George's Hospital, Charing-cross Hospital, and the Royal Free Hospital will also be represented at the Conference.

THE EXPLOSION AT THE ADMIRALTY.

MR. SWAINSON, who was injured by the explosion at the Admiralty, we are pleased to say continues to make satisfactory progress. The recovery of consciousness was accompanied by vomiting, which lasted at intervals until midnight. The wounds of the scalp are healing, there having been very little suppuration. The wound of the left conjunctiva was accompanied either by fracture of the lacrymal bone (no bone was, however, felt on probing) or wound of the nasal duct, as sudden emphysema of the upper eyelid followed an attempt to blow the nose on the day following the injury. There was no wound of the eyelids. The temperature has not exceeded 99°. There has been no headache or deafness, and the mind has been quite clear since the 24th.

CYSTICERCUS IN THE VITREOUS.

DON PEDRO LAGLEYZE describes, in a Buenos Ayres medical journal, a case of cysticercus in the vitreous, this being the only recorded instance of an inter-ocular entozoon occurring in the Argentine Republic. The patient was a man thirty-four years of age. Six months before his eye trouble commenced he had passed a tape-worm. The first symptoms were pains in the supra-orbital arch and flashes of light in the right eye, the power of vision of which rapidly deteriorated. A month after these symptoms commenced he noticed that the vision of the left eye was beginning to be impaired; he then first consulted a medical man, who treated him for more than a year before he was admitted to the hospital at Buenos Ayres, under the care of Dr. Don Cleto Agiurre. There was no injection of either conjunctiva; pupils sluggish, vision much impaired. Left eye: fingers scarcely counted at fifteen centimetres, tension normal, atrophy of papilla. Right eye: an extensive hiatus in the superior half of the field of vision, central vision $\frac{1}{4}$, tension greatly diminished. With the reflector a characteristic cysticercus was seen in the vitreous, with two suckers visible, but not the corona of booklets; it was dead, but apparently had not been long so, for about a month afterwards there was a considerable change, the head having become globular and the neck shrunken. The body, which had been translucent, and therefore appeared red by the transmission of rays from the fundus, was now opaque. The retina was detached at the point where the animal pierced it. The papilla was white, as in the left eye, this being not due to the entozoon, but merely a coincidence. The atrophy continued to increase in spite of remedies.

THE MEDICAL SOCIETY OF LONDON.

THE Medical Society is the first of the London Societies to bring its session to a close. The last ordinary meeting was held on Monday last. Next Monday the annual oration will be delivered at 8.30 P.M. by Professor Humphry of Cambridge, when it is anticipated that a large and distinguished audience will be present. The conversazione takes place immediately after the delivery of the oration.

A HEROIC GIRL.

AT an inquest held at St. Thomas's Hospital on the body of Elizabeth Chandler, aged three years, who died from burns received at the fire which lately occurred in the Borough, the jury returned a verdict of "Accidental death," adding that the conduct of the unfortunate young woman, Alice Ayres, who was instrumental in saving the lives of two other young children, and who herself had fallen a victim to the disaster, was beyond all praise. So far the jury have expressed the opinion of everyone who read the sad story of this brave girl's presence of mind and dreadful death. But we would go a little further, and urge that such conduct is not beyond recognition. Why should not the name of a heroine be kept in memory? and what more appropriate way, in the case of one who saved little children's lives only to lose her own, than by the establishment of a ward for children, or at least a cot, in one of the hospitals, which should bear the name of "Alice Ayres"?

HISTOLOGY OF SYMPATHETIC GANGLIA.

THE paper which was communicated by Dr. Hale White to the Royal Medical and Chirurgical Society, at its last meeting, on the Morbid Histology of the Sympathetic Ganglia, is one which merits some attention. In all researches in which almost negative results are arrived at there is a tendency for the mind to *overlook* and forget. The only change which Dr. White has felt himself justified in pronouncing as pathological is an increase in the number of the elements in the connective tissues of these ganglia—an abnormal condition, that is to say, of the purely supporting structures of the bodies in question. Though this is a conclusion which cannot be cavilled at in the present state of microscopical investigation, yet it must be admitted that it is anything but satisfying to the clinical physician. It may be that more minute methods of examination may at some future time reveal changes of the finest sort in the most intimate structure of the nervous tissues. The possibility of ultra-microscopical alterations of texture still remains to us to explain some affections which are obviously related to disordered action of parts of the nervous system. Chemical or other modes of investigation of the protoplasm of nervous tissues may give us an earlier insight into the molecular disorder which certainly exists, whether it be perceptible or not by any of our present methods of inquiry.

SMALL-POX IN WEST HAM.

Small-pox is widely prevalent in West Ham, and Dr. Drake, the medical officer of health, is stated to have recently reported that no less than 290 fresh cases had come under his notice during three weeks. A house-to-house inspection has been instituted by the guardians with a view of promoting vaccination, and if this work is carried out promptly and systematically, it cannot fail to be of material value in saving the inhabitants from preventable disease and death. Nothing short of the efficiency obtained by the St. Pancras guardians in this matter should be aimed at. But the intervention of the sanitary authority appears to be much needed. Thus, we read in the local press of a girl who suffered from small-pox being found to occupy the same bed as her parents, and this in a small house of four rooms, holding no less than twenty-one persons. Overcrowding is one of the nuisances most dangerous to health, and as such it should be dealt with without delay wherever it is found to exist.

ALVELOZ IN CANCER.

The United States consul at Pernambuco has forwarded to his government a report by Dr. Bandeiro, surgeon to the Hospital Pedro II., on the value of the juice of the alveloz as an external application in cancer. It seems to have been useful in epithelioma of the lips, nose, face, and eyelids, but to have been less successful in ulcerated sarcomas and carcinomas not of the epithelial variety. Several preparations are made with salicylic acid, &c., but it is thought that the juice is far more active when used in a fresh state. The natives employ the cut end of the stem of the plant, Euphorbia heterodoxa, to cauterise the sore, using at the same time a decoction of tobacco leaves. A supply of the prepared juice has been forwarded to the Marine Hospital in Washington and to the Cancer Hospital in Liverpool, from which institutions reports will doubtless be forthcoming if the alveloz juice treatment prove to possess any advantages over other methods of treatment of cancers.

SYPHILIS IN HOOFED ANIMALS.

The Veterinary School of Madrid has reported that the disease from which solipedes are suffering in the district of Villarcayo (Burgos) is syphilis. It is feared that it may extend to animals whose flesh is used for food, and that syphilitic meat may be sold in the markets. A suggestion as to protective legislation, which is stated to have the approval of the Director of Charity and Health and of another important official, has been made to the Royal Council. It is not, however, expected that more will come of it than of numerous other projects which have previously been presented and quietly shelved.

CHOLERA IN EUROPE.

Rumours of cholera from time to time remind us of the prospect of a recurrence of the disease in an epidemic form during the coming summer. The most important announcements have come from Spain, where early in April a considerable number of cases were alleged to have occurred in the province of Valencia. The statement was, however, soon followed by contradictions, and precise information on the subject has since then not been forthcoming. France, however, imposed a three days' quarantine on arrivals from Spain. Since then we have heard that a case has occurred at Osio, not far from Bergamo, and a French newspaper has reported cases at Cairo. In the meantime, the oft-postponed European Conference has again been postponed to May 15th, and it is stated that the India Office will send separate representatives. Switzerland will be represented by M. Bavier, the Swiss Minister to Italy, assisted by Dr. Souderberger and Dr. Reali.

URIC ACID CALCULUS OF ENORMOUS SIZE.

We desire to place on record some particulars of one of the most remarkable calculi that the records of surgery furnish. It was removed by the high operation (Petersen's modification), on Wednesday morning, by Sir Henry Thompson, from a man aged sixty-two. The stone was of an oval form, of pure uric acid, without any phosphatic incrustation whatever. It weighs 14 oz. avoirdupois (405 grammes), and measures 4½ in. long, 3¼ in. wide, and 2⅛ in. thick. The operation was rapid, and performed without difficulty; and the patient's present condition is unusually good and promising.

REMOVAL OF INFECTIOUS CASES.

Mr. W. G. Lacy, of 24, Ringford-road, West-hill, Wandsworth, has introduced an innovation in the means of removal of infectious patients to the several infectious hospitals which is, we think, likely to work well. By employing a private brougham, which he keeps for this purpose, all publicity is avoided, and less excuse is offered to persons to keep infectious cases in their homes on the plea of the injury to their business that the ordinary conspicuous removal entails.

ENTERIC FEVER AT NORWICH.

A somewhat wide and sustained prevalence of enteric fever is in progress in Norwich, and, so far as can be judged at the present time, the disease is more likely to be associated with faulty conditions of sewerage than with the water or milk supplies. Dr. Herbert Airy, of the Local Government Board, is making local inquiry into the matter.

SIR WILLIAM JENNER.

We are happy to be able to state that Sir William Jenner is progressing as favourably as is possible towards recovery.

At the recent meeting of Middlesex magistrates for the transaction of county business, upon the suggestion of the Parliamentary Committee, the Lunacy Acts Amendment Bill was referred to a special committee composed of the justices on the visiting committees of the three county lunatic asylums, with power to confer with the authorities, and to take such steps as might be deemed necessary to secure any necessary alterations. It was also decided to provide an additional asylum for the pauper lunatics of the county to accommodate 1000 patients, the administrative offices and plans generally being so arranged that provision may be hereafter made for additional patients up to 1000.

At the same meeting it was resolved that the committee appointed to superintend the administration of the Adulteration Acts be authorised to seek counsel's opinion as to the power of the county inspectors to require samples of milk in course of delivery, and that the inspectors under the Adulteration Acts be authorised, under the directions of the committee, to pay and charge to the county the reasonable expenses of an assistant and of a witness, and that they be authorised to obtain professional assistance in the conduct of prosecutions in which legal or other difficulties are likely to arise.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of March, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies contained on the whole less organic matter than in either of the previous months of the present year, the amount being small for this season. The water drawn from the Lea contained slightly more organic matter than the previous month's samples. All the waters were clear and bright.

AT the monthly meeting of the Board of Management of the Manchester Royal Infirmary on the 27th ult., it was stated that there had been a very considerable increase of small-pox in the city during the past month, and in order to meet it the Monsall Hospital Committee had been obliged to erect at once an emergency building to accommodate twenty-four patients. As many as forty cases had been received during the preceding seven days; and there were at the time of the meeting 119 cases in the hospital.

THE question of lay administration of hospitals is not confined to this country. A Madrid paper states that the functions of Director of the Provincial Hospital of that city are now discharged, with assistance, by a lawyer. The Zaragoza *Clinica* also complains that a young lawyer has just been appointed Director of the Hospice of Calatayud.

DR. HUGHES BENNETT will deliver at the Westminster Hospital during the ensuing summer session a short course of lectures on the Recent Advances in Neurology, with their practical application to the investigation of diseases of the nervous system. They will be given on Mondays and Thursdays at four o'clock, beginning on May 4th.

DR. CHAMPNEYS has been appointed Lecturer on Midwifery and Obstetric Physician to St. George's Hospital, in succession to Dr. Barnes. This is an appointment which we feel sure will give general satisfaction.

PROFESSOR LORETA performed his operation of divulsion of the cardiac orifice for the seventh time on April 8th in the surgical clinique of Bologna. The proceeding was successful, and the patient is doing well.

AN exhaustive account of what is known of the therapeutics of antipyrin has recently appeared from the pen of H. Huchard. (Paris: Octave Doin, 8, Place de l'Odéon.)

THE *American Quarterly Journal of Neurology and Psychiatry* has closed its career at the end of its third year of publication.

BROWN INSTITUTION.

THE following is extracted from the Report by the Professor-Superintendent, Mr. Victor Horsley, to the committee of the Brown Institution for the year 1884, and presented to the Senate of the University of London on February 25th.

The report describes the whole of the past year's work of the hospital only, that part of it relating to the work done in the laboratory being an account of researches carried on during the autumn since the appointment of the present Professor-Superintendent on September 1st.

The report of the curative work of the institution has been drawn up by Mr. Ernest Barr, M.R.C.V.S., &c., who has fully maintained the high efficiency of this department.

The most noticeable feature in the list of diseases from which the animals treated have suffered, is the increase in cases of rabies. After a considerable period of complete immunity an outbreak of rabies took place towards the end of the year, which at one time appeared likely to assume alarming proportions. Nearly the whole of the tabulated cases (nineteen) occurred in the course of a few weeks, and many animals in the neighbourhood of the institution were known to have been bitten. Fortunately, however, the outbreak subsided, and for some weeks past no fresh case has come under notice. A suggestion was at one time made by a late Professor-Superintendent (Dr. Burdon Sanderson), but not acceded to by the Government authorities, that the leading symptoms of rabies should be printed on the back of dog-licences. They might, with advantage, be again counselled to follow this good advice.

The success of the stamping-out process as followed in glanders is proved by the continual small percentage of that disease: if it were possible to adopt a plan to pay compensation and destroy those doubtful cases which are so frequently the means of spreading the disease, it would not be too much to hope that in a few years London might be almost free from glanders.

The difficulty noted in previous reports of conducting the in-patient department of the institution has been intensified in a year that has seen the ruin of so many small traders. Day after day it is found that the very poor, those for whose benefit the institution is especially intended, are unable to pay the cost, or anything like the cost, of keeping an animal in the hospital. Frequently, in fact generally, the horse is the chief or sole means of gaining the living of a family, so that when its services are lost, it is as much as the members can do to earn sufficient for daily food, without paying from 1*s*. 3*d*. to 2*s*. 6*d*. daily for the maintenance of the horse.

Another point that might be brought to the notice of the Committee is the absence of a veterinary library. For years past it has been felt as a great inconvenience by gentlemen working in the laboratory subjects relating to animal pathology that there is no collection of foreign or English books of reference. A few pounds spent yearly would go far to lessen the inconvenience.

From September 1st to December 31st, the laboratory has been actively used for various researches in comparative pathology. 1. Dr. Theodore Cash has continued his researches (*a*) into the means of preventing the action of the poison of splenic fever and tuberculosis by means of certain disinfectants; and (*b*) into the subject of visceral innervation and abdominal temperature. 2. Mr. G. F. Dowdeswell, M.A., has been conducting experimental researches into the virus of (*a*) fowl cholera and Davaine's septicæmia, in the course of which investigation he has made the important observation that the organism, "which is presumably the cause," is identical in both diseases; (*b*) hydrophobia; and (*c*) human cholera, especially with relation to the lower animals, and particularly the cause of their power of resistance to the influence of the comma bacillus of Koch. 3. Dr. Wooldridge, who has for some time been engaged in researches on the albumen of the blood, and especially in relation to various forms of anæmia, has been able (by means of the facilities offered him by the institution, in the shape of the gas engine, &c.) to confirm his previous investigations, and to considerably extend them. 4. Dr. Angel Money, by a few experiments, has succeeded in elucidating some of the symptoms which render diagnosis of coarse brain disease uncertain, and he has also commenced a research into the pathological anatomy of paraplegia following interference with the circulation in the spinal cord, a condition of things the correct knowledge of which is of practical importance in the diagnosis of paraplegia in animals. 5. Dr. Erb carried on for six weeks a research into the anatomy of the ear in fishes. 6. I have myself been engaged in a series of experiments on monkeys, which have resulted, I believe, in the demonstration that the loss of function of the thyroid gland is the cause of the obscure disease known as myxœdema. By the same research I have shown that the operation of thyroidectomy, as at present practised by surgeons, is unjustifiable, and should be modified. I have also, as occasion offered (twice), performed inoculation experiments, to lay the foundation of a research into the causation of the melanotic disease to which every white horse beyond middle age appears to be liable. With Mr. Shattock I have commenced an investigation into the healing of wounds by the first intention. This appeared to me desirable on taking office, seeing that it is a subject of vital importance, and one the details of which are as yet unknown.

OUR WAR CORRESPONDENT'S EXPERIENCES IN THE SOUDAN.

No one, I venture to assert, ever knows, or can appreciate to their fullest extent, the true comforts of a happy home until he has been away from it for a time; and surely the feeling is intensified tenfold by what an onlooker, especially a non-combatant, has to face, to see, and to endure amongst the distressing and harrowing scenes observed after a well-contested, hard-fought action on some foreign battle-field. Here, there, and everywhere shocking details present themselves in sufficient abundance to unnerve the very strongest mind, whilst the disparity between order and disorder, betwixt calm and fury, reason and frenzy, is so great as to make the bravest recoil from and shudder at the sickening sights which present themselves again and again on the gory trampled sod.

But hearts may break, and tears may flow;
The bugle will sound, and the soldier must go.

By-the-bye, that reminds me that neither the early morning slumbers nor the noontide siesta of those taking passage in that admirably-arranged troopship *Persian Monarch* were ever disturbed this side of Gibraltar by sounds of martial music. For some reason best known to the officials at home, no enthusiastic bugler—no, not even a scatter-brained drummer—figured amongst the list of troops despatched to the seat of war in the above-named vessel. The situation for the young artillery officer in command was as novel as well as unpleasant a one as could be well imagined. In his dilemma he applied to the captain of the ship, who suggested the use of the ordinary ship's bell, the ringing of which had on the first occasion the effect of instantly bringing all hands on deck to extinguish some imaginary fire—the more hungry in search of their dinner; whilst a general belief that the ship had run into some fog became so prevalent that this substitute for a bugle or a drum had at last to be given up altogether. Of course amongst us there were some carping critics who never let an opportunity slip for saying bitter things against the powers that be—oversight, blundering, &c.; but to me there was something particularly droll, as well as rich, in the practical joke played upon the military element by the transport department at home in depriving Lieut. —— and his subs of two such necessary but at the same time ear-splitting military accompaniments. With fine fast-steaming vessels to order, and with ample funds to freight and despatch them, it has become an easy matter for our Government to transport a large and powerful army even to the littoral of the Red Sea, as a passage of some sixteen days is now quite sufficient to span the distance from Portsmouth to the Soudan. But what a change has already come over the scene! A fortnight since those sturdy fellows in front of me were, with reddened noses, pinched features, and wrapped up in their great military overcoats, trying to dodge the cold nipping gusts of a strong north-easter by crowding together to leeward and under shelter of the ship's warm funnel and casing. Now these self-same men, in the scantiest of attire, and under an increase of thirty degrees in the temperature, are seeking shady corners, or leaning over the gunwale, intent on noting the progress of our ship, and, lost in admiration, are beguiling their leisure hours by watching Sol from his height playing fantastic sport with his rays on the glassy surface of this loveliest of cerulean-coloured seas.

Some smoke, some play at cards, others merry ditties sing,
While idle ones there are who never do a single blessed thing.

Yes, there they are in all directions, from forward to aft, in their shirt-sleeves and trousers, with sunburnt faces, and with heavy drops of perspiration exuding from every pore, crying out about the heat already, and begging for a drop of water—a good long drink to assuage their inordinate thirst; not a few, too, still more overcome by the languor that invariably seizes all on their first visit to the Red Sea, are lying helplessly on their backs beneath a double awning, a barely sufficient protection from the heat and glare of a mid-day tropical sun. Happily, our vessel has made a smart run of it, and by midnight of the 15th the engines are stopped in order to pick up the outer reef buoy on the following morning. An excellent landfall has been made, for just as daylight breaks the desired object is seen about a mile and a half away on our weather bow. Towards it we cautiously proceed at half speed.

WHAT ONE SEES ON ARRIVAL OFF THE PORT.

Breakers on all sides of us. To the right, to the left, they are discerned. Huge white-crested rollers, sending their rainbow-tinted spray aloft, are observed, one after another, dashing over and amongst the coral reefs which encircle as well as protect the harbour of Sawakin, twenty miles away, to which we are bound. Our charts being accurate, and our commander careful as well as very experienced, there is small need of fear in navigating the narrow though straight channel, which, running inside of the reefs and parallel with the shore, leads up to the place we are in quest of. After getting into deeper water our speed is somewhat increased, so that by breakfast-time we come in sight of the shipping, whitewashed houses, and tents of our army, dotted here and there over the sandy-coloured plain. Sawakin (usually spelt Suakin) is situate on the eastern coast of Africa, about two-thirds of the distance down the Red Sea. Its harbour proper, if not land-, is certainly coral-locked; not steep to approach, but from a very deep middle channel the water suddenly shoals to either shore. Its entrance is very narrow, and the mouth of it is guarded by a British gunboat lying there for that purpose. As most of the vacant berths are occupied by transport and other ships, all vessels arriving off the main harbour must heave to (they cannot anchor in sixty fathoms), and wait until boarded and brought in by a Royal Naval navigating lieutenant appointed specially for that purpose. Proceeding cautiously up harbour, the hospital ship *Ganges*, suitably painted white, is first noticed as she lies moored along the northern shore. Astern of her is the B.I. steamship *Bulimba*; she provides the expedition with machine-made ice, and is devoted to the reception of medical and surgical cases of a specific nature; whilst abreast of her, on the opposite side of the fairway, is anchored (or supposed to be so, for she sometimes drags her anchor and falls foul of her consorts) the hulk for the reception of small-pox patients. Still further westward and nearer to the town lies the *Arab*, of the Union line, a naval transport ship used as a sort of headquarters by that courteous and very indefatigable officer, Captain Fellows, R.N., and the really hard-worked staff immediately under his command. Astern of the *Arab* is the *Calabria*, utilised as a distilling vessel, whence issue the many thousands of gallons of bright clear water supplied daily for the entire force in camp. After inspecting her,

WE GO ON SHORE

at Quarantine Island, and close to the water's edge see lines of white tents of every shape and pattern. The best are the square-shaped ones. They are made of a material something like twill, lined with yellow calico, double roofed, both lofty and airy, and have four openings, one on each face, for the freer admission of both light and air. The few bell-shaped ones there are have to be exchanged shortly as soon as the new can be obtained from the store. To the eastward are pitched those belonging to the firm of Messrs. Lucas and Aird, railway contractors for the Berber line; these are in turn succeeded by the auxiliary hospital pavilion, and farther on follow the private tents of Surgeon-Major Hinde and the medical staff attached to that institution. The rising ground upon which these temporary habitations are placed is light-yellow in colour, and of a sandy porous nature. This sand is only some eighteen inches deep, a very hard, white, compact, coral formation existing beneath. No moisture, therefore, ever remains long on the surface. The latrines, placed to leeward and in rear of the tents, are simply spaces enclosed by bamboos and coarse Indian matting, supplied with a strong horizontal wooden bar, beneath which are two or three zinc buckets, which, with sand ready at hand, are used and cleaned upon the earth-closet system. Offensive smells seldom result from their use, and if they should at any time become obnoxious, the effluvium could readily be removed by the free use of disinfectants—MacDougall's powder, &c. Passing by the engineer's camp, crossing the causeway, and entering on the desert, on a somewhat elevated sand mound is seen

THE MAIN OR BASE HOSPITAL,

under the immediate superintendence of Brigade Surgeon Tanner. This camp hospital consists of a number of tents, most of which are of Anglo-Indian pattern and construction. They are not, as elsewhere, placed too near to one another, but are pitched with some regard as to method and regularity. In the centre of the group is a large square pavilion, called the operating theatre, and on entering it one is at once struck with the comfort and perfection of arrangement the interior of this place displays. An operating-table occupies the central position, and on the walls or sides of this calico habitation are hung up square creamy-white coloured bags, containing sponges, lint, bandages, antiseptic dressings, in fact any and everything needed, and that should be readily accessible in case of urgency or hurry. Already another correspondent, as well as myself in a former communication, has paid a well-merited compliment to Surgeon-Major Tobin for his energy and painstaking in this special portion of the department. Now, the store-room, or rather store-tent, with its heterogeneous assortment of goods, medicines, hospital equipment stores, and sanitary necessaries, must not be omitted from the list. I do not know the name of the officer in charge of it; but for the method, as well as the care displayed in the arrangement of the various odds and ends, from a bedstead down to a mosquito curtain, the superintendent deserves my warmest congratulations for the manner in which his different duties have been carried out. Each of the officers' hospital-tents can accommodate about eighty beds; the bedstead itself is very light and formed of thin split bamboos, and each one is supplied with more than sufficient bedding for use in this hot climate. Before leaving the subject of the base hospital I may take this opportunity of thanking the medical officers there for their courtesy to me on every occasion, and more especially give my thanks to Surgeon-Major Allan for supplying me with statistical information, which he, as the able representative of the Registrar's Department, is always desirous as well as capable of giving. Adjacent to, but south-west of, the "H" Redoubt, is

THE NEWLY-SELECTED CEMETERY.

Up to the time of my quitting Sawakin, the former burial-ground was close to and situate just opposite and to windward of where the transport ships *Arab*, *Bulimba*, and *Ganges* are moored. In this badly-selected portion of ground set apart for burial purposes, after our recent actions with the foe, a great number of interments had taken place, and as the graves for the corpses could not be dug more than some eighteen or twenty inches deep in consequence of the existence of a very hard substratum of coral, whenever the wind blew from the northward (the usual direction during the night and after-portion of the day), a horrible effluvium percolated through the superficial layer of sand, and was wafted directly across the vessels moored close to it. This I am told not only proved most offensive to the nostrils of all on board, but threatened most dangerous results from a sanitary point of view. During my sickness on board the *Arab* a very strong remonstrance against any further interments was made to the officials at head-quarters, and resulted in their ordering an immediate discontinuance of any more burials in this spot, and in the selection of a more appropriate *locale*—the new cemetery above referred to. Let us now pay a flying visit to

THE ORDNANCE WHARF,

situated at the head of the creek, and just above where our men-of-war are anchored. The major in charge of this place (where all the military stores are accumulated) evidently has his hands full enough to discharge with efficiency the duties of so trying as well as difficult a department. Around the officers' tents, alongside of, and adjacent to the pier, lie scores of bales, hundreds of boxes, and packages of every conceivable shape, size, and description. In one spot carts are drawn up in a row; in another groups of harness. Not far from these, again, coils of telegraph wire and a host of water-pipes are seen; and would it be believed that by some wiseacre arrangement at home, amongst all this heterogeneous assortment of general merchandise and collection of commercial goods, a medical officer has himself to go, search for, and pick out the requisites for his own department. Dr. ——, of the Base Auxiliary Hospital, *assured me—in fact, I saw it with my own eyes*—that it had taken him some days to segregate from the rest the few hospital belongings urgently wanted, and that were then lying on the ground in front of me. A medical officer might be spared this difficulty surely, especially when in face of the enemy, by all the medical stores and hospital equipments being forwarded together in a hospital vessel, or placed in some portion of a ship where they could be readily got at on her arrival in port. The *Ganges* and her arrangements throughout set our authorities an admirable lesson in medical transport, and her well-organised system could certainly be copied with advantage by anyone desirous of improving the conditions under which these things are now done. Yet another little matter requires looking into. I have every reason for believing that in the present campaign one or two senior medical officers have taken a passage in one ship, while their junior brethren are sent out possibly some days afterwards in another. The one party arrives without his assistants, without medicines or appliances, to find nothing ready, everything to do, everything to organise, and no junior officer to lend assistance in the difficulty. More than this: when the "subs." present themselves, Brigade and simple Surgeon So-and-so are unknown to one another. How, then, in the name of goodness, can the principal medical officer direct with advantage? He should be acquainted with the capacity, as well as the fitness, of any and each officer for any special post he may feel desirous of appointing him to, and not have all this organisation to go through when the services of all his men are urgently needed in the field. That the principal medical officer has perfected his arrangements in the Soudan with great judgment and considerable tact and skill is no answer in face of a possible difficulty likely to occur in less able hands; and it would be well if the Home officials, acting on the well-known maxim that "prevention is better than cure," considered the propriety of holding a course of practical field hospital training during the summer season, and when perfected in drill send the officers and their bearer companies all out together, and not despatch them piecemeal abroad to serve under new officers and in new duties, as they hitherto seem to have been doing. And now let me say a word or two about

THE CLIMATE,

concerning which so much has already been written and said. Climate, everyone knows, is an important factor in the success or otherwise of any expeditionary undertaking. Especially would it be so in the African Soudan. It is a well-recognised fact amongst travellers and persons who have lived out in the Soudan that, with the exception of the Persian Gulf, there is no hotter or more unhealthy locality than the western littoral of the Red Sea in the summer season. During the months of October, November, and December, even up till the beginning of April, the climate is pleasant and healthy enough, with genial warm days and cool nights, a cloudless sky, dryness of air, an average daily temperature of 78° F., and refreshing sea-breezes setting in about 10 A.M. and continuing till after dusk, the climate of the Soudan at this season is by no means prejudicial to health, and not one-half as bad as is commonly supposed. The sense of freedom, moreover, and elastic buoyant health, which so many describe as experiencing when they first arrive out, and the stimulus to appetite afforded by a brisk early march across the sandy plains, are the best evidences of salubrity, as well as of a certain amount of health-promoting power. The existence of so small a percentage of sick amongst the number employed during the past three months is more than confirmatory of this view; but let April pass and a complete change sets in. The thermometer no longer remains at 70° or 80° during the day, and falls as low as 50° at night; but rises to 112° in the shade, and remains at 100° during the night. No fresh sea-breeze sets in to cool this awful temperature, and man as well as beast fall prostrate beneath its influence. The super-heated air becomes then terribly relaxing, and has a most depressing effect upon the animal economy. Such a feeling of languor and lassitude seizes on one that it cannot by any effort of will be shaken off. The depression increases hourly, and, possibly with scarce any further appreciable warning, heat apoplexy strikes its victim and speedily relieves him from any additional tortures of mind and body; or to take a more lingering case still, after such a terrible drain upon the system, such an exhaustion of all the vital powers, through loss of appetite and deprivation of sleep, dysentery, that scourge of the tropics, sets in, with all its chain of most distressing and painful symptoms, and continues with all its agonising characteristics until death at last comes along to finish what heat and the overpowering influences of such a detestable climate has begun. Granted, some have withstood the climate well enough; but the majority have but too easily succumbed to its disastrous effects. I believe 40 per cent. were invalided last summer season, and nothing short of sheer madness should tempt any government to sanction the retention of troops, especially under canvas, in so dangerous a summer climate as that of the African Soudan. My own experience in the Red Sea (by no means limited) would scarcely warrant my giving so dogmatic an opinion on this subject were not my ideas backed up by what I hear from all others who have lived out there. They are unanimous in condemnation of leaving the troops at Sawakin to stew in their own gravy. The Arab knows what the effect of permitting this will end in. From what I learnt from a friendly sheikh, Osman Digna, after his last great attempt on March 22nd, is reported to have said, "I shall no longer attack the enemy in force; I shall retire to the mountains, and simply harass his lines of communication; the climate during the coming season will do the rest." God forbid, say I, it ever should. And the question naturally arises,

WHAT SHOULD BE DONE WITH OUR TROOPS?

Perhaps the Government are in a strait, having found out to their cost that it is a far easier matter to get into a difficulty than it is to escape out of one. To remove our troops from the Soudan at this juncture simply means death to, and total annihilation of, those friendly natives we leave behind us at Sawakin; and yet a decision to leave our men out there, under the scanty protection afforded by a tent's cover, will be fraught with equally unsatisfactory results. The consensus of opinion amongst my press colleagues is decidedly adverse to such a determination on the part of the Horse Guards. More than this, one or two correspondents have already spoken out with no uncertain sound. They have issued a warning not one moment too soon, as well as stated their opinions in language not one word too strong. Our only policy now is to confess to a serious mistake, and get out of the dilemma as soon as we possibly can. Now,

THE PAGES OF JOURNALISM

are always open for the insertion of fair criticism, in order not only to expose arrant blunders and point out grave and wretched mistakes, but also to accord honour where honour is due. Now, while paragraph upon paragraph in the public press has been lavish in its praises of the conduct and bravery of our English troops, especially the Berkshire regiment, the sailors, and marines, and have not hesitated—and very justly so, too—to speak of the thorough efficiency with which the Transport Department has been administered in the Soudan by such able officers as Captain Fellows, R.N., and the other members of his staff, surely we must not, indeed we cannot, forget that there are other brave hearts (the Medical Staff) who have equally borne their share of the heat and burden of the day. Amongst that heroic band there has, too, been no shrinking, no holding back, but always hard at work—ay, in the very thick of the fight, too, these men have carried their lives in their hands, and by their praiseworthy conduct and painstaking certainly deserve a modicum of that approval and praise a satisfied and generous public is more than ever ready to bestow. John Bull has a long urse we know, but in spending his money freely he certainly desires to see something for his outlay, and he may rest assured (lay correspondents have noticed it) that the sick and wounded are well cared for, and that no department has been better administered in the Soudan than this has been. The hospital accommodation has as yet been ample. The bearer companies are complete and efficient, the medicines and the comforts sufficient and good, whilst the officers themselves have been kind, patient, as well as brave unto death. Poor Lane was nearly the first to fall, and Surgeon-General O. Barnett may be well complimented indeed for the excellence as well as the efficiency of his arrangements throughout the present campaign.

UNIVERSITY DEGREES FOR LONDON MEDICAL STUDENTS.

A NUMEROUS and influential deputation of the Metropolitan Counties Branch of the British Medical Association was received by the Senate of the University of London (Sir James Paget in the chair) on Wednesday last, at 5 P.M. From the large attendance of the members of the Senate of the University there is every reason to think that the objects of the deputation are engaging, at least, the serious attention of those interested in the cause of medical education.

Sir JAMES PAGET, in opening the proceedings, informed the deputation that the report of the Council of the Metropolitan Counties Branch of the British Medical Association had been in the hands of each member of the Senate, and had received the earnest consideration of that body. He would be glad to hear any remarks from the members of the deputation.

Mr. MACNAMARA, President of the Branch, said that the chief object of the deputation was to obtain from the Senate of the University some promise that the examinations of the University for the degree of Doctor of Medicine should undergo certain modifications which would have the effect of rendering it possible for the majority of London medical students to obtain a degree in Medicine. He did not wish to define accurately the changes which ought in the opinion of the deputation to be made, but it would be sufficient if the Senate would undertake to make such concessions as would meet the necessities of the case. Speaking for himself, Mr. Macnamara considered that the present examinations were too stringent only in the requirements of the Preliminary Scientific and Matriculation Examinations; but he did not think there would be any occasion to lower the standard of the final examinations. He urged that the time at the disposal of medical students generally being limited, it should not be wasted by the acquisition of knowledge which would ultimately prove useless.

Dr. BRISTOWE urged that the preliminary examinations were unnecessarily severe, and considered that all that was necessary for the medical student to become a sound practitioner, and deserving of a degree, was that he should have a tolerable general education, and that he should be well grounded in the practice and theory of medicine.

Dr. CHOLMELEY was of opinion that the examinations were too stringent all round, and hoped that the Senate would see its way to compliance with the objects of the deputation.

Dr. LAUDER BRUNTON said that there was a want of sympathy between the University of London and the medical schools, and this was different from what existed at other Universities, such as Victoria and Edinburgh. In the last named Universities the teachers of the students formed part of the examining body of the University. At the University of London, the teacher seldom being the examiner, it was possible for the candidate to fail to satisfy the examiner, because what the teacher perhaps considered unimportant the examiner might regard as very important and give discredit accordingly, and *vice versâ*. He suggested that a less severe curriculum should carry with it the title of M.D., whilst the present stringent course should confer the degree of Doctor of Medical Science.

Dr. WADE (Birmingham) hoped that the Senate would bring the degree in Medicine within reach of the majority of medical students.

Sir WILLIAM MAC CORMAC pleaded for modifications in the earlier examinations only.

Sir JAMES PAGET said it was a mistake to suppose that it was useless to approach the Senate with the views which the deputation had put forward. It was the object of the Senate of the University of London to raise medical education in all its branches, and at the same time to make the degrees accessible to medical students. But it was very difficult to strike a fair medium between all the various views which had been laid before the Senate. The Senate had considered how this might best be done in conformity with the aim of the University that its M.D. degree should represent a higher degree of attainment than that expressed by the M.D. degree of any other University. He assured the deputation that the Senate was very far from disregarding the views of others, and he asserted that movements had gone on in the Senate which already had resulted in considerable modification—as, for example, in the Preliminary Scientific Examination. The deputation might rest assured that their views would receive careful attention.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Blackpool Urban District.—The death-rate for Blackpool during 1884 was 19 per 1000, including visitors; but on making the needed corrections the rate was 17·1, which exhibits an excess on that for 1883, the excess being accounted for by the prevalence of autumnal diarrhœa. For much the same reason the infant mortality under one year reached 146 per 1000 births registered, as opposed to 139 in the previous year. These higher death-rates have to a large extent been due to mortality in the summer quarter, and, as Dr. Welch remarks, they are suggestive, in connexion with the overcrowding of the town at that season, of want of cleanliness personal and domestic, and of the general neglect of children. Superadded to these normal conditions, the heat of 1884 was exceptional. But Blackpool, though a principal health resort, is not altogether free from conditions which are distinctly inimical to health. Some of the old large privy-pits, which give off foul vapours and contaminate the subsoil, still exist; many of the ash-pits are uncovered, and are almost as great a nuisance as the privy pits; drainage is defective in nearly all the older houses, and the ventilation of the sewers is by no means perfect. Fortunately, however, sanitary work, which aims at the removal of these causes of disease, is steadily in progress. Thus, no less than 630 ash-tubs replaced offensive ash-pits last year, a house-to-house inspection is securing many improvements as to internal drainage, and Dr. Welch's advice as to conveying the sewer air above the level of the houses and otherwise improving the system of sewerage is being considered. The Sanatorium, which we assume is the same faulty one as formerly, did some substantial good by securing the isolation of twenty infectious cases. Some work of disinfection is also carried out, but it would appear to be hindered from want of proper appliances. Blackpool is so largely frequented by those who are in quest of health, and it is so deservedly a popular pleasure resort, that we hope no efforts will be spared in the direction of getting rid of all removable causes of disease, and in providing the town with suitable modern buildings and appliances for preventing the spread of infection amongst the population.

Aylesbury Rural District.—Dr. Hilliard reports that during the drought of 1884 the sources of the Chiltern Hills water-supply failed to give an adequate service. This is a most unfortunate occurrence, since one of the principal sanitary wants of many places within reach of the company's works, lies in the substitution of the Chiltern Hills supply for the suspicious well waters. Both scarlatina and diphtheria were somewhat severely prevalent in the district, the latter notably at Bierton. Dr. Hilliard refers to the analogy between the two diseases, but expresses the belief that they are distinct in their origin and that neither is capable of producing the other. On the other hand, he suggests that the conditions which favour the germination of the scarlatina spore are equally favourable to the development and support of the seeds of diphtheria, so that the two diseases flourish contemporaneously, and in the theory that both may have evolved from a remote common ancestor he sees a harmony with the new favourite evolution theory. The mortality of the district was 18 per 1000 for 1882, in 1883 it was 17, and for 1884 it had fallen to 16.

Sittingbourne Urban District.—The general sanitary work of this district is reported by Dr. Sutton as progressing favourably, and the death-rate for last year is given as 16·6 per 1000. The infectious hospital has again proved to be a great safeguard against the spread of disease. Four patients were attacked with scarlatina, they were removed to the sanatorium, and no other cases ensued. The slaughter-houses and bakeries have been carefully inspected, and such defects as were found in them and elsewhere have been remedied.

Milton Rural District.—Here Dr. Sutton reports a death-rate of only 11·9 per 1000. The prejudice formerly existing against isolation in the Sittingbourne and Milton Joint Hospital is disappearing, and sanitary work is steadily advancing, defective conditions being remedied by such structural alterations as are needed.

Watford Urban District.—In his annual report for 1884 Dr. Brett draws the serious attention of the Local Board of Health to the want of means of isolation for non-pauper patients, the only accommodation available being an iron shed on the workhouse grounds, and even this is not furnished. He also advocates the provision of efficient sewer ventilation, and points out that the iron shafts at present existing are useless for this purpose. Permanent means of sewer flushing are also wanted to replace the work now inefficiently carried out by water-carts. Excluding deaths, occurring in the workhouse, of persons from outlying places, the rate of mortality was 17·8 per 1000.

Hastings Urban District.—The borough of Hastings, with a population now estimated at 46,310, had in 1884 a death-rate of 15·9 per 1000, which is below the average of that which prevailed during the preceding ten years. The zymotic rate was 1·8 per 1000, and it included 28 fatal attacks from diarrhœa, which was more than usually prevalent amongst children. For some of the zymotic diseases the sanatorium was most useful, 45 patients, including 31 cases of scarlatina, being admitted during the year. A thorough system of house inspection is in progress, 790 premises having been overhauled during the past year, and many defects being in consequence remedied. Dr. Knox Shaw also reports an improvement in the removal of house refuse from premises. A Bill is to be presented to Parliament which includes certain clauses as to sanitary matters. One relates to the appointment of a building surveyor, an officer who is really essential in every populous place where the authority are desirous of seeing efficient building bye-laws properly carried out. Another requires notification of infectious diseases from both the occupier and any medical practitioner in attendance. Opposition to that part of this provision which relates to the medical practitioner is being raised by many medical men in the borough. A third clause authorises the construction of a destructor for the treatment of all forms of waste refuse.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5799 births and 3994 deaths were registered during the week ending April 25th. The annual death-rate in these towns, which had been equal to 25·0 and 23·2 per 1000 in the two preceding weeks, rose again last week to 23·4. During the first three weeks of the current quarter the death-rate in these towns averaged 23·9 per 1000, against 24·1 in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 15·7 in Derby, 17·4 in Portsmouth, 18·4 in Leicester, and 18·8 in Birmingham. The rates in the other towns ranged upwards to 31·2 in Sunderland, 32·2 in Preston, 31·9 in Cardiff, and 35·4 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had increased in the eight previous weeks from 377 to 484, further rose last week to 524; they included 213 from measles, 127 from whooping-cough, 45 from diarrhœa, 42 from small-pox, 40 from "fever" (principally enteric), 32 from scarlet fever, and 25 from diphtheria. No death from any of these diseases was registered last week either in Derby or in Bolton; whereas they caused the highest death-rates in Manchester, Cardiff, Sunderland, and Newcastle-upon-Tyne. The greatest mortality from measles occurred last week in Manchester, Sunderland, and Newcastle-upon-Tyne; from whooping-cough in Cardiff and Blackburn; from scarlet fever in Leicester and Sunderland; and from "fever" in Portsmouth, Salford, and Norwich. The 25 deaths from diphtheria in the twenty-eight towns included 10 in London, 7 in Liverpool, 2 in Preston, and 2 in Newcastle-upon-Tyne. Small-pox caused 72 deaths in London and its outer ring of suburban districts, 1 in Bristol, 1 in Liverpool, and 1 in Manchester. The number of small-pox patients in the metropolitan asylum hospitals, which had increased in the preceding four weeks from 830 to 1062, declined again to 1034 on Saturday last; the admissions, which had been 141, 185, and 307 in the previous three weeks, declined again last week to 246. The Highgate Small-pox Hospital contained 89 patients on Saturday last, 26 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 512 and 449 in the preceding two weeks further declined last week to 382, and were 41 below the corrected weekly average. The causes of 82, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Bristol, Leicester, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Salford, Oldham, Derby, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 25·0, 23·4, and 23·3 per 1000 in the preceding three weeks, further declined to 22·7 in the week ending the 25th ult., and was 0·7 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 12·9 in Leith and 18·3 in Greenock, to 23·7 in Paisley and 27·1 in Glasgow. The 555 deaths in the eight towns included 30 which were referred to whooping-cough, 20 to measles, 14 to diarrhœa, 9 to "fever" (typhus, enteric, or simple), 4 to scarlet fever, 4 to diphtheria, and not one to small-pox; in all, 81 deaths resulted from these principal zymotic diseases, against 68 and 76 in the preceding two weeks. These 81 deaths were equal to an annual rate of 3·3 per 1000, which was 0·2 above the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough in the eight towns, which had been 34, 17, and 23 in the preceding three weeks, further rose again to 30 last week, of which 19 occurred in Glasgow, 4 in Edinburgh, and 3 in Greenock. The 20 fatal cases of measles showed a decline from recent weekly numbers, and included 19 in Glasgow. The 14 deaths attributed to diarrhœa differed very slightly from the average. The deaths referred to "fever," which had been 10 and 7 in in the previous two weeks, were 9 last week, of which 3 occurred in Glasgow, 2 in Edinburgh, and 2 in Dundee. Three of the four deaths from diphtheria were returned in Glasgow; and the 4 from scarlet fever included 2 in Glasgow and 2 in Paisley. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 134 and 131 in the preceding two weeks, further declined to 118 last week, but were 9 above the number returned in the corresponding week of last year. The causes of 72, or 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 32·2 and 33·7 per 1000 in the preceding two weeks, further rose to 34·0 in the week ending April 25th. During the first three weeks of the current quarter the death-rate in the city averaged 33·3 per 1000, the rate during the same period not exceeding 22·6 in London and 18·6 in Edinburgh. The 230 deaths in Dublin last week showed a further increase of 2 upon the numbers in the two preceding weeks, and included 28 which were referred to the principal zymotic diseases, against 29 in each of the two preceding weeks; 15 resulted from measles, 4 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 3 from diarrhœa, 2 from whooping-cough, 1 from diphtheria, and not one from small-pox. These 28 deaths were equal to an annual rate of 4·1 per 1000, the rate from the same diseases being 3·3 in London and 2·1 in Edinburgh. The fatal cases of measles in Dublin, which had been 19 and 15 in the previous two weeks, were again 15 last week The deaths referred to "fever" showed a decline of 4 from the number in the previous week; while the deaths from the other zymotic diseases scarcely differed from the numbers in recent weeks. Six inquest cases and 6 deaths from violence were registered. Nearly a third of the deaths were recorded in public institutions. The deaths of infants showed an increase upon those in the previous week, while those of elderly persons had declined. The causes of 32, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

ARMY MEDICAL ARRANGEMENTS IN CASE OF WAR.

In case of war, the Director-General of the Army Medical Staff is believed to have arranged for the employment on active service of a large number of civilian surgeons at such a rate of pay as to secure the services of really good men—£3 a day is mentioned. It would be cheaper to do this than to give an indefinite number of commissions in the Medical Staff, as in that case, at the conclusion of operations, the number of medical officers would far exceed the requirements of the service. As almost all the officers of the staff would be ordered abroad, the home duties would be performed by retired medical officers and civilian surgeons engaged for the emergency, with perhaps one medical officer on full pay in charge of each important hospital or station.

Surgeon-General Charles Dodgson Madden, of the Army Medical Staff, who served with distinction in the Crimean, Indian mutiny, and Abyssinian campaigns, has taken over the position of Principal Medical Officer to the troops in India, vice Surgeon-General Sir A. D. Home, V.C.

It having been decided to strengthen the medical department at Quetta, in view of the augmentation of troops there, Surgeon-Majors Montgomerie, Blennerhasset, and Fitzroy Maclean, of the Army Medical Staff, have been ordered thither, and several other officers of the same department have also been placed under orders for the same destination.

War Office.—Army Medical Staff: Surgeon-Major Tobias Barnwell is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Edward Eustace is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major William O'Byrne White is granted retired pay, with the honorary rank of Brigade Surgeon; Deputy Surgeon-General Edward Malcolm Sinclair, M.D., has been placed on temporary half-pay on account of ill-health; Surgeon-Major William Frederick Ruttledge is granted retired pay, with the honorary rank of Brigade-Surgeon.

India Office.—The Queen has approved of the retirement from the Service of the undermentioned Officers of Her Majesty's India Military Forces:—Deputy Surgeon-General Arthur James Payne, M.D., of the Bengal Army; Deputy Surgeon-General William Pearl, of the Madras Army; Brigade Surgeon Edmund Eyre Lloyd, of the Madras Army; Surgeon-Major Thomas Stick Veale, of the Bengal Army. The undermentioned Officers have been granted a step of honorary rank on retirement:—Deputy Surgeon-General Arthur James Payne, M.D., of the Bengal Army, to be Surgeon-General; Brigade Surgeon William Peyton Partridge, of the Bombay Army, to be Deputy Surgeon-General; Surgeon-Major Robert Pringle, M.D., of the Bengal Army, and Surgeon-Major Thomas Stick Veale, of the Bengal Army, to be Brigade Surgeons.

Militia Medical Staff.—Surgeon Thomas Allman, 3rd Battalion, the Connaught Rangers, to be Surgeon-Major.

Admiralty.—The following appointments have been made:—Surgeon H. S. R. Sparrow, to the *Asia;* Mr. R. F. B. Halpen, to be Surgeon and Agent at Arklow, Mizen Head, and Kilmichael; and Mr. John Macdonald, to be Surgeon and Agent at Ardrossan.

Artillery Volunteers.—2nd Devonshire: Alfred Hughes Twining, Gent., to be Acting Surgeon. 1st East Riding of Yorkshire: Acting Surgeon William Draper to be Surgeon.

Rifle Volunteers.—4th Hampshire: Surgeon Henry Geary Dyer, from the 2nd Hampshire Rifle Volunteer Corps, to be Surgeon; Acting Surgeon Edward Roe, from the 2nd Hampshire Rifle Volunteer Corps, to be Acting Surgeon; Acting Surgeon Justyn G. D. Douglas, M.D., from the 2nd

Hampshire Rifle Volunteer Corps. to be Acting Surgeon. The above-named officers will be considered to have received Commissions of the same rank and date as those previously held by them in the 2nd Hampshire Rifle Volunteer Corps.—2nd Volunteer Battalion, the Worcestershire Regiment: Honorary Assistant-Surgeon William Smith Batten to be Surgeon. 1st Volunteer Battalion, the Princess of Wales's Own (Yorkshire Regiment): Surgeon and Honorary Surgeon-Major Robert Fothergill resigns his Commission; also is permitted to retain his rank, and to continue to wear the uniform of the Battalion on his retirement.

Correspondence.

"Audi alteram partem."

DR. WEBER'S CROONIAN LECTURES.

To the Editor of THE LANCET.

SIR,—In one of Dr. Hermann Weber's interesting Croonian Lectures on the Hygienic and Climatic Treatment of Chronic Pulmonary Phthisis, which have just appeared in THE LANCET, he expresses a hope that some means may eventually be discovered of destroying the bacillus and its spores, either in the air we breathe or in our tissues, without injury to ourselves. I have long thought that if we are to contend successfully with phthisis, and set some limit to its diffusion, it is in the direction here indicated that our labours may most profitably be expended. For, as Dr. Weber remarks, "when once the system is infected, we do not yet know of any parasite-killing remedies which, in effective doses, would not injure the host together with the parasite." The mischief, in fact, is then done, the fatal seed is sown, the bacilli are protected within the tissues and secretions of the lungs, and antiseptics are comparatively useless. *On the subject* of disinfectants in their varied bearings much has been written of late years: some apparently coagulate albumen; others oxidise organic matter; while others, again, are fatal to the growth and increase of microzymes. Many of these substances have long been used in cases of sickness, and in numerous instances beneficial *results have* followed their adoption. But though we are often told that antiseptic gases sufficiently potent to destroy contagium cannot be tolerated by the living tissues, we still know comparatively little regarding the amount of rough usage the respiratory organs are capable of enduring, not only with impunity, but in some cases with apparent advantage. The information we possess on this subject is certainly scanty; still, certain facts have been recorded which tend to show that healthy lung tissues may be beneficially influenced by the action of disinfectants, and at times *seemingly* protected from the inroads of the bacillus. Whether in such cases these organs become so altered in their chemical composition, or in their *vital* properties, as no longer to prove a congenial soil for the growth of the parasites, or whether the bacilli and their spores are themselves destroyed, we have at present no means of deciding. In confirmation of these remarks, I would refer to what really may be looked upon as extended experiments on antiseptic remedies, continually and efficiently carried out in the north-western Highlands and islands of Scotland. The great majority of the inhabitants of these districts unwittingly expose their lungs to an atmosphere largely charged with disinfecting fumes, thereby teaching us a useful lesson on the extraordinary tolerance of the respiratory organs to such sources of irritation. I will briefly describe the mode of life of these Highlanders in so far as the construction and heating of their dwellings is concerned, as in this manner the singularly abnormal atmospheric conditions to which they are exposed may be most conveniently studied. The houses to which I refer are known in the Highlands as "bothies," and are the homes of the hardy Crofters to whose grievances public attention has of late been so strongly directed. Many of them live under the same roof as their cattle, and in numerous instances the air of the dwelling reeks with the [illegible] ammoniacal exhalations given off from the excretions of these joint inmates of the cabin. These primitive dwellings are warmed by a peat fire kept constantly burning in the centre of the floor; the luxury of a chimney is often altogether unknown. The smoke which rises from the combustion of this fuel, after thoroughly diffusing itself through every nook and corner of the building, makes its escape by a hole in a corner of the roof. Now, it may be asked, how is the health of these persons influenced by inhaling constantly both by day and by night such an atmosphere as this—an atmosphere so pungent that considerable irritation of the eyes and nostrils is frequently experienced by those exposed to the fumes? Generally speaking, these Highlanders are remarkably vigorous and long-lived, and singularly exempt from the ravages of tubercular phthisis. Indeed, so rare is consumption in these hovels that I was led to investigate the causes of this immunity upwards of twenty-five years ago, and published the results of my inquiries in an article on "The Non-prevalence of Consumption in the Hebrides and along the North-Western Coast of Scotland," which appeared in the *British and Foreign Medico-Chirurgical Review* for October, 1860. At that time I visited most of the districts to which my investigations extended, and from what I saw and heard came to the conclusion that the comparative immunity from phthisis which these persons enjoy is to be ascribed, chiefly at all events, to the inhalation of the peat smoke and the antiseptic ingredients contained therein, the tar, the creasote, and the tannin, together with various volatile oils and resins. Black unctuous peat is rich in these substances. At that time, I need hardly say, nothing was known of the bacillus of Koch. It further appeared that any exemption from attacks of consumption which these Highlanders enjoy was only extended to them so long as they resided in their smoky huts. When they migrated to other parts of the country, or took up their abode in chimneyed dwellings, they often suffered like their neighbours; nor after the lungs once became infected was a return to the homes of their fathers followed by favourable results; the fumes of the smoky cabin then exercised no curative influence. The inference to be drawn from these remarks is sufficiently obvious: when the bacillus has once established itself in the lungs the time for antiseptic remedies has gone by. On the other hand, where there is merely a predisposition to phthisis, whether hereditary or acquired, where also the climatic or social conditions for its diffusion are favourable, and where healthy persons are brought into close contact with those who are suffering from the disease, there it is reasonable to assume that disinfectants may prove of great value as prophylactics. Hence we may anticipate that in the course of time an efficient system of aerial fumigation will not alone assist the physician in warding off disease, but may enable the surgeon also to dispense with the cumbrous appliances associated with antiseptic dressings and the steam-diffusing urn. I am, Sir, yours truly,

Manchester, April, 1885. JOHN ED. MORGAN, M.D. Oxon.

THE VICTORIA UNIVERSITY, MANCHESTER.

To the Editor of THE LANCET.

SIR,—In reference to the paragraph in your issue of April 25th relating to the facilities for graduation offered by this University to qualified practitioners, I wish to be allowed to state that attendance upon lectures in a college of the University for at least two years is indispensable in all cases before graduation. This is a provision of the Charter empowering the University to grant medical degrees, and is one which the authorities have no power to dispense with. I should be much obliged if you would publish this explanation, as I have received many letters written under an impression that the degree of M.B. is now offered to qualified practitioners on condition only of their passing the Intermediate and Final Examinations for that degree. The new regulation simply excuses those whose qualification is anterior to 1885 the Preliminary Examination in Science and the attendance thereat.—Yours faithfully,

April 28th, 1885. ALFRED T. BENTLEY, Registrar.

THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

To the Editor of THE LANCET.

SIR,—It would appear that the Council of the College, in their proposed new Charter, desires to perpetuate a grievance, and to still render meetings of Fellows and Members inoperative, by providing that only business shall be entertained which has *the consent of the Council*. What would be thought if the Government—with the view, for instance, of silencing the Home Rulers—were to enact that nothing should be brought forward in the House of Commons without the consent of the Cabinet? And yet this is the position in which the Council of the College desires to keep the Fellows and Members when proposing to meet in their corporate capacity. I feel that such legislation, or the desire to retain it, by those appointed to represent without fear or favour a great English institution, is much to be regretted. If the right of meeting is to be conceded at all, let it be free and unfettered, or it is not worth having at any price. I trust that a representation will be made to the Home Secretary upon this point, before an unconstitutional regulation is allowed to form part of the revised Charter of our College. I am, Sir, your obedient servant,

Liverpool, April 25th, 1885. REGINALD HARRISON.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

PUERPERAL FEVER AND PRACTITIONERS.

AT an inquest held here last week upon the body of a female who died a few days after her confinement, the cause of death was shown to have been puerperal fever. It appeared that the gentleman who attended at the confinement was unable to attend, on an urgent message being sent as to the patient's condition, but another practitioner went in his place. It came out in the evidence that both had been attending cases of puerperal fever previous to their seeing the deceased. The jury found that death had resulted from puerperal fever, but how she had contracted that disease there was not sufficient evidence to show. They were, however, of opinion that the conduct of the doctor in attending deceased in her confinement and at the same time attending persons suffering from puerperal fever, was highly unsafe and improper. This is one aspect of the case; but there is another not shown. In poor neighbourhoods often very pressing demands are made upon the practitioner as regards midwifery attendance, and if engaged to a case he feels bound to attend, while if he neglects he is equally open to censure from a coroner's jury should any untoward event take place. The moral is that young practitioners, in attending cases, should be more careful of risk to their patients and themselves.

THE VOLUNTEER REVIEW AT GOSFORTH.

A meeting of the Volunteer medical officers has been held in Newcastle, when it was unanimously resolved to form a complete bearer company of the ambulance detachments of the different corps taking part in the review at Gosforth-park on Whit Monday; and to march past in bearer company formation. This is the first bearer company that has paraded at a review in the north. Surgeon-Major Frazer, A.M.D., from the depôt, occupied the chair at the meeting, when it was stated that the general commanding the district would inspect the Gosforth Corps, of whom from 7000 to 8000 volunteers will be present. It may not be amiss to mention an incident which occurred here at a former review, as showing that some little discrimination is desirable in giving tickets to those who are appointed to fall out as wounded and requiring ambulance attention. A corporal was found as wounded, and the bearers from his ticket saw that it was a case of gunshot wound of the leg, and that the corporal would have to be carried to the ambulance tent in the rear, and at a considerable distance. The corporal, whose "fighting weight" was nearly 20 st., was duly and carefully rolled on to the stretcher; but the bearers, being slight lads, found that they could make no progress with their burden, while the "wounded," thinking it rather dull, picked up his rifle and ran back to the ranks.

DEATH OF DR. BOWMAN.

The death of Dr. H. O. Bowman, of Sunderland, has deprived that borough of a well-known physician and magistrate. Dr. Bowman, who was in his sixty-sixth year, had been ailing for some time, but it was not until about a week ago that his illness assumed a serious character. On the 22nd ult. he was known to be in a sinking state, and he died on the following Thursday night. The deceased was a native of Carrickfergus, near Belfast, and had been in practice at Sunderland for forty years, first coming as an assistant to the well-known Dr. Clanny; afterwards he commenced practice on his own account. About eighteen years ago he gave up general practice, but continued acting as a physician until quite lately. He was consulting surgeon to the Royal Albert Asylum, Lancaster, and also a consulting surgeon to the Sunderland Infirmary.

A VERY "CURIOUS" CASE.

"Vomiting an Ask." Under this heading a paragraph has appeared in the *Alnwick Herald*, stating that a boy, aged ten, fell ill about three months ago. He lost appetite and became very weak and emaciated, being at one time treated for gastric fever, but all to no avail until a local practitioner was called in, and he at once administered an emetic, which resulted in bringing forth from the boy's stomach a full-grown newt, locally termed an "ask" (*asker*). Since then the boy has completely recovered health, and has "never looked behind him." I make no comment on the case further than to say that country editors sometimes swallow "queer" things.

Newcastle-on-Tyne, April 20th, 1885.

EDINBURGH.

(*From our own Correspondent.*)

UNIVERSITY GRADUATION IN ARTS.

ON Wednesday, April 22nd, the annual graduation ceremonial in the Faculties of Arts, Law, and Divinity took place. Honorary degrees were conferred upon several distinguished scholars and authors, amongst whom were M. Renan (conferred *in absentia*), Mr. Leslie Stephen, Mr. Theodore Walrond, and Dr. C. J. B. Williams.

ANNUAL ADDRESS: UNIVERSITY REFORM.

After the formal ceremony of "capping" the graduates was concluded, Professor Crystal delivered an address dealing chiefly with the subject of University Reform, and advocated the adoption of open teaching within the University. Each subject, he said, should be taught by additional teachers as well as by the ordinary professor, and these should be recognised as professors extraordinary or as *privatim docentes*, with a definite academic position. This he would wish carried out in all the Faculties in the University; and the intra-academical competition thus produced would obviate the necessity for an extra-academical school. The provision of *increased scope for extra-mural teaching* he deprecated on the ground that its main object would be to prepare candidates for examination, and it would thus inevitably bear upon it the stigma of a cramming system. Professor Crystal's reasoning may, and probably does, bear cogently upon the case of an Arts or Philosophical Faculty, but it is directly at variance with what long experience has proved to be the best arrangement in the Faculty of Medicine. The greatest teachers of whom Edinburgh can boast were extra-academic lecturers at one part of their career, and in most cases made their fame as such; and the extra-mural school has kept up the name of Edinburgh as a popular seat of learning during periods when the light within the University was darkness. The historical argument tells strongly against Professor Crystal's view, and it is to be feared that his system, applied in however broad a spirit to the Faculty of Medicine, would not prevent temporary diminutions in the lustre which the present keen competition outside tends to preserve within the University. A plea for the extension of the extra-mural system of teaching under the provisions of the Universities (Scotland) Bill has already been urged by the Edinburgh University General Council Association, and similar representations were recently made to the Lord Advocate by representatives of the corresponding Association of Glasgow University.

ST. ANDREWS AMBULANCE ASSOCIATION.

At a meeting lately held, the Edinburgh branch of the St. Andrews Association gave a series of practical demonstrations of the work carried on under its auspices. The necessary evolutions for the resuscitation of the drowned, the temporary treatment of fractures and other injuries, and a number of ingenious methods of transporting the injured were put into practice by the trained students of the Association before a large and enthusiastic general audience.

UNIVERSITY EDUCATION FOR WOMEN.

In presiding recently at a meeting of the Edinburgh Association for the *University Education of Women, the* Countess of Aberdeen referred to the presence of clauses in the Universities Bill enabling the Scottish Universities to provide for the graduation of women, and congratulated the Association upon the results of the work which it has carried on in the same direction.

IRELAND.

(*From our own Correspondent.*)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

The annual election for examiners of this College takes place the first Tuesday in May; but on this occasion the Council, in order to obtain the new supplemental Charter, which is now in the hands of the Lord Lieutenant, have at a recent special meeting adjourned it to the 19th, or the third Tuesday in the same month. By the new Charter lecturers attached to medical schools will now be eligible for examiners. No examiner for the future is to hold office for more than three consecutive years, and if he engages in private teaching his election will be null and void. It is understood that not more than two teachers connected with any one school or hospital will be eligible to obtain seats on the Board of Examiners. These alterations are just and proper, and, by providing for a more frequent change in the composition of the Courts of Examiners, will do away with the long-existing evil. Rumour has it that one or more members of Council under the new regulations will be candidates for examinerships, and if so they must previously resign their seats as councillors. The annual elections for President and Council will take place early in June. Among other candidates for seats in the Council will be Dr. Edward Hamilton, Professor of Surgery in the Medical School of the College, who, it is needless to say, will be duly elected.

VISIT OF THE PRINCE OF WALES.

Among the numerous addresses presented to the Prince and Princess of Wales during their visit to Belfast was one from the President and Professors of the Queen's Colleges, and another from the members of the Ulster Medical Society. In that from the College it was remarked that it was the first University College in Ireland to admit women to its classes. The Prince having replied, Miss Everett, mathematical scholar of the Royal University of Ireland, on behalf of her fellow-students, presented a bouquet to the Princess, in recognition of the interest evinced by Her Royal Highness in the higher education of women. The visit of the Prince of Wales to this country has been a most successful one; but I regret to have to add that two members of our profession conducted themselves in a manner unworthy of their education and social position. Dr. Charles Tanner of Cork, for the part he took among a disorderly mob on the occasion of the visit of the Prince, has received an intimation from the secretary of the Royal Cork Yacht Club at Queenstown that it is the intention of the members to propose his expulsion from the Club. The other person is a Dublin surgeon, who had a black flag attached to his residence during the visit. It is gratifying to note that this conduct has met with a well-merited rebuke, for at a meeting of a Medical Society last week, on his commencing to read a paper, almost all present rose *en masse* and left the room, to express their disapproval of his conduct.

UNIVERSITY OF DUBLIN.

In consequence of the death of Earl Cairns, Chancellor of this University, an election of a successor will take place early in May. The Board have submitted the following to the Senate for their selection: viz., the Earl of Rosse, the Marquis of Waterford, and the Earl of Milltown.

A FOOLISH HOAX.

A very stupid trick was played by some person who inserted in the obituary column of a Dublin newspaper this week a statement to the effect that Mr. Wheeler, a hospital surgeon well known in this city, had died last Sunday. As Mr. Wheeler is still in good health, it is to be hoped that the perpetrator of this hoax will be discovered and punished.

DUBLIN HOSPITAL SUNDAY FUND.

Before leaving Dublin the Prince of Wales handed the [illegible] Royal [illegible] 100 guineas, in order to be lodged to the account of the Hospital Fund for 1885.

As regards the statue in memory of the eminent lithotomist, Mr. William Dease, to which I alluded last week, I may add that it will be placed in the entrance hall of the Royal College of Surgeons, and probably will represent Mr. Dease seated instead of standing, as the height of the hall is not such as will permit the latter position.

Dublin, April 28th, 1885.

THE ROYAL COLLEGE OF PHYSICIANS.

At a Comitia of the Fellows of the College, held on Thursday (30th ult.), Dr. Frederick Farre, Vice-President, in the chair, a large number of Members were duly elected to the Fellowship of the College. (The list is published on another page.)

On the motion of the President, an honorarium of 100 guineas was unanimously voted to Dr. Ord in recognition of his services as Secretary of the Committee and Editor of the Revised Edition of "The Nomenclature of Diseases."

A Report from the Council respecting the Croonian Trust was, after some discussion, received and ordered to be circulated. Owing to the great increase in the sums received under this Trust, it is proposed to take steps to obtain permission to extend its application beyond the payment of an annual lecturer.

A recommendation was adopted from the Committee of Management of the Examining Board for England to the effect that the regulations applicable to the admission of candidates from the English Universities be extended to such of the Scotch and Irish Universities as require a residence of at least two years at the University: and that the Colleges retain the right to withhold such privilege if the examination of any University fail to come up to a certain standard. It was also resolved to accept the diploma of M.D. of the University of Toronto as qualifying for admission to the Membership Examination.

A report of a committee appointed to consider the question of publishing Harvey's manuscript lectures was received, and its consideration adjourned.

On the motion of Dr. Wilson Fox, the College appointed a committee to advise as to steps to be taken with reference to the signing of lunacy certificates.

SHIRLEY MURPHY TESTIMONIAL.

FIRST SUBSCRIPTION LIST.

Samuel Morley, Esq., M.P.	£10	0	0	Dr. James Wakley	£2	2	0
Dr. Cayley	2	2	0	R. F. Charles, Esq.	1	1	0
Dr. Jas. F. Goodhart	1	1	0	Dr. E. Seaton	1	1	0
Dr. Thos. Barlow	1	1	0	W. Ash, Esq.	5	5	0
Rev. A. Godson	1	1	0	Miss E. S. Ledgett	1	1	0
William Wilson, Esq.	2	2	0	J. Whitcher, Esq.	1	1	0
Chas. Wilson, Esq.	1	1	0	Jas. Fraser, Esq.	1	1	0
William Hickson, Esq.	1	1	0	T. F. Gandar, Esq.	2	2	0
Dr. J. G. Glover	2	2	0	Miss Gandar	1	1	0
Thomas Wakley, Esq., *jun.*	1	1	0	J. A. Hexton, Esq.	2	2	0
J. W. Gandar, Esq.	2	2	0	W. Adams, Esq.	1	1	0
John Hamer, Esq.	2	2	0	G. C. Ash, Esq.	21	0	0
Isaac Butler, Esq.	1	1	0				
A Well-wisher	5	0	0	Berkeley Hill, Esq., F.R.C.S.	2	2	0
Lady Henry Somerset	21	0	0	John Faulkner, Esq.	2	2	0
P. Banting, Esq.	1	1	0	Thos. Reynolds, Esq.	1	1	0
A Friend	15	0	0	*Morris Lewis, Esq.*	1	1	0
J. Northcote Vince, Esq.	1	1	0	Thomas Wakley, Esq.	2	2	0

The Executive Committee wish it to be understood that the smallest contributions are acceptable.

MEDICAL NOTES IN PARLIAMENT.

Cremation.

In the House of Lords on the 24th ult., the Earl of Dalhousie, in reply to the Earl of Onslow, stated that he did not quite know what the powers of the Government in the matter of cremation were. Some time ago they were asked to legislate with the view of regulating the practice of cremation by certain safeguards, but the Secretary of State thought at that time that the people of this country were not the least inclined to adopt it as an [illegible] of disposing of the dead. He would endeavour to ascertain what the views of the Secretary of State now were.

Lunacy Acts Amendment Bill.

On the 27th ult. the Lord Chancellor moved the second reading of the Lunacy Acts Amendment Bill. The Earl of Milltown, in supporting the Bill, thought it was to be regretted that the Government had not seen their way to vesting compulsorily private licensed houses in some public body, and thus get rid of that most objectionable element, profit. As long as the profitable system was allowed to continue he feared the public would never be altogether satisfied. At any rate he hoped this Bill would eventually and speedily lead to the total suppression of the system. Again, there was an absence of any provision that the proprietors of these houses should be properly qualified and fit persons; that was a point which was well looked after in other countries, and he thought it ought to be provided for in the Bill. Then, again, the Bill contained no provision that the medical officers should be independent persons, and that was a deficiency which he thought ought to be supplied. He could not understand why the Bill did not extend to Ireland. The lunacy laws of Scotland differed materially from those of England, and he could therefore understand why the Bill should not extend to Scotland; but there was very little difference between the law in England and in Ireland, and consequently he thought the Bill ought to include Ireland. The Bill was read a second time; and a Bill for consolidating the laws relating to lunacy was read a first time.

Rags and Small-pox.

In the House of Commons on the 23rd ult., the Lord Advocate, in reply to Dr. Farquharson, stated that he had communicated with the Board of Supervision in regard to the recent occurrence of two cases of small-pox among workers in the Woodside Rag Works, and that the attention of the Board has been directed to the fact that small-pox on more than one occasion had occurred among the operatives in the works referred to, and others. There could be no doubt that in some of these cases the infection had been traced to rags imported from abroad, as well as to the rags collected in this country. The Board's medical officer had made inquiries at the instance of the Board, but as it appeared very doubtful whether, under the Public Health Act, the Board could compel the papermakers to disinfect the bundles of rags before being used, the Board had mainly directed the attention of the local authority to the importance of making provision for the isolation and treatment of the infected persons, so as to prevent the spread of the disease.

The Custody of Lunatics.

On Thursday, Sir W. Harcourt, in reply to Mr. W. Corbet, who asked if his attention had been called to several cases recently reported, in which workhouse authorities refused to receive, even temporarily and pending inquiry, wandering insane persons for whom reception orders were duly made by police magistrates, said that he was clearly of opinion that the proper place for those poor unfortunate persons was neither the police cells nor the gaols, but the workhouse; but great difficulties had been raised by the workhouse authorities. He trusted to be able to insert a clause in the Lunacy Bill, now before the House of Lords, that would clear up the matter.

Obituary.

PAUL BENNETT CONOLLY,

SURGEON, ARMY MEDICAL STAFF.

This young medical officer, as we announced last week, died near Korti, on the Nile, of enteric fever, at the age of thirty. The news will cause great grief to a wide circle of friends, and at Charing-cross Hospital (his old school) his untimely death has produced a universal feeling of dismay and sadness. All who knew him predicted for him a brilliant future, and some account of what he has done is here appended. His first experience of war service was in the Russo-Turkish campaign at Bucharest, and he was present at the final attack upon Plevna. He was decorated by the King of Roumania with the Gold Cross. He next volunteered for service at the Cape during the last Zulu war, and was with Sir E. Wood in the many engagements preceding that of Kambula, taking part in the attacks on the Zlobani Hill and in the battles of Kambula and Ulundi. He was mentioned in dispatches for his gallantry at the Zlobani Hill, and at the end of the war received the medal and clasp. On returning to England he determined to enter the Army, and shortly after finishing his course at Netley was sent in command of a bearer company to the Cape during the Boer war. His next active duty was in the Egyptian campaign of 1882, where he was surgeon to the 2nd Bearer Company, and was present at the battles of Kassassin and Tel-el-Kebir, receiving the medal and clasp and Khedive's star. After his return he read for the Primary F.R.C.S., which examination he passed in May, 1884, holding at the time the appointment of Assistant Instructor to the Army Hospital Corps at Aldershot. When the relief of Gordon was determined on he volunteered his services, and was appointed to the light division of the Camel Corps, and has during the campaign been mentioned more than once in flattering terms by those who saw his arduous work between Korti and Gakdul. He was a typical specimen of the soldier-surgeon; pleasant, light-hearted, though sensitive to a degree, he combined a brave heart with a steady hand and a winning manner, with all the highest and essential qualities of a thorough surgeon.

STEPHEN HEMSTED, M.R.C.S.

Mr. Stephen Hemsted, whose death occurred recently at Newbury, Berks, was the eldest son of Henry Hemsted, M.D., many years coroner of the borough of Newbury; grandson of Stephen Hemsted, M.D., of Ilsley Hall, one of the coroners for the county of Berks; and great-grandson of Stephen Hemsted, surgeon, of Haverhill. He was born in 1802, and obtained his professional education under Mr. Abernethy at St. Bartholomew's Hospital. In 1825 he obtained the diploma of Membership of the Royal College of Surgeons of London, and commenced practice in Newbury, where he soon acquired an extensive reputation. Mr. Hemsted was universally respected throughout the district in which he resided, and will be long regretted by those who had the pleasure of being intimate with him.

JOHN CAUNT, M.R.C.S.

We have to record the death of Mr. John Caunt, who for many years resided and practised as a surgeon at Wheeler Gate, Nottingham. He left Nottingham in 1856, and some time after was appointed by the chief inspector of factories, A. Redgrave, Esq., C.B., to a district in London. He discharged the duties of this office faithfully to within a short time of his death. The deceased gentleman was greatly esteemed by a large circle of friends and patients, by whom the announcement of his death will be received with regret, though he had attained the ripe age of eighty-two years. Mr. Caunt died on the 19th ult. at Dudley-place, St. Mary-terrace, Paddington, and was buried at Great Willesden.

Medical News.

Royal College of Physicians of London.—The following Members have been elected Fellows of the College:—

Carter, William, M.B. Lond., Liverpool.
Davidson, Alexander, M.D. Edin., Liverpool.
Smith, Thomas Gilbart, M.D. Dub., Harley-street.
Herman, George Ernest, M.B. Lond., West-street.
Finlay, David White, M.D. Glas., Montagu-street.
Skerritt, Edward Markham, M.D. Lond., Clifton.
Bennett, Alexander Hughes, M.D. Edin., Queen Anne-street.
Sangster, Alfred, M.B. Camb., Savile-row.
Semon, Felix, M.D. Berlin., Welbeck-street,
Harris, Vincent Dormer, M.D. Lond., Welbeck-street.
Ormerod, Joseph Arderne, M.B. Oxon., Upper Wimpole-street.
West, Samuel Hatch, M.D. Oxon., Wimpole-street.
Smith, Robert Shingleton, M.D. Lond., Clifton.
Smith, David Boyes, M.D. Edin., Netley.
Savage, George Henry, M.D. Lond., Bethlehem Hospital.
Thorburn, John, M.D. Edin., Manchester.
Owen, Herbert Isambard, M.D. Camb., Gloucester-gardens.
Carrington, Robert Edward, M.D. Lond., St. Thomas's-street.
Kidd, Percy, M.D. Oxon., Brook-street.
Sharkey, Seymour John, M.B. Oxon., Portland-place.

Royal College of Surgeons of England.—The following gentlemen, having passed the required examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 23rd ult.:—

Arnold, William, L.S.A., Hale, Altrincham.
Hayes, Julian Philip Swindell, L.K.Q.C.P.I., Tavistock-crescent.
Collins, George Fletcher, L.K.Q.C.P.I., Dublin.
Barendt, Frank Hugh, L.R.C.P. Lond., Liverpool.
Fowler, Thomas Webb, L.S.A., Matlock.
Carrington, George Hedwig, L.S.A., Eccles.
Hughes, Samuel, L.S.A., Liverpool.
Robson, Herbert John, L.R.C.P. Ed., Leeds.
Crosby, Robert, L.S.A., Sunderland.
Armstrong, Leonard Henry, L.S.A., Cambridge-street.
Brown, Thomas Alexander, M.B. Edin., Edinburgh.
MacLaren, Murray, M.B. Edin., Edinburgh.
Barwise, Sidney, L.S.A., Birmingham.
Smith, Franke Chamberlain Hart, L.S.A., Bedford.
Cooper, Chas. Bolingbroke, L.R.C.P. Lond., Liverpool.
Hubbersty, Robert Stephen, M.B. Edin., Stamford.

Admitted on the 24th ult.:—

Whitwell, Alfred Frank, L.S.A., Shrewsbury.
Hodgson, Gerald George, L.S.A., Brighton.
Matthey, Arthur, L.R.C.P. Ed., Southampton.
Hunter, George Holbrey, L.S.A., Frohlake, near Doncaster.
Strong, Henry Barlow, L.K.Q.C.P.I., Bernard-street.
Hebblethwaite, Septimus Montague, L.S.A., Moor Allerton.
Crowdy, Francis Demainbray, L.S.A., Harcourt-buildings.
Scott, Bertal Hopton, M.D. Toronto, St. Peter's-road.
Joberns, William, L.S.A., Walsall.
Cockerill, John William, L.R.C.P. Lond., Portsdown-road.
Simpson, James Tracy, L.R.C.P. Ed., Approach-road.
Cook, Henry Samuel, L.S.A., Birmingham.
Beater, Orlando Palmer, M.B. Dub., Dublin.
Melson, George Hyde, L.S.A., Knowle, Warwickshire.
Wigam, William Harper, M.B. Durham, South Shields.
Hall, Gilbert Capel, L.S.A., Birmingham.
Fisher, Thomas Hammond, L.S.A., Southport.
Wakefield, Mark Joseph, M.B. Durham, Gateshead.

Admitted on the 25th ult.:—

Blakeney, Hugh Theophilus Weare, L.A.H. Dub., Dorking.
Evans, Robert, L.R.C.P. Ed., Granville-square.
Basset, Walter, L.R.C.P. Lond., Bristol.
Lysaght, William Connor, L.R.C.P. Lond., Bristol.
Kendall, Hy. Wm. Martindale, L.S.A., Bexley Heath.
Brooks, Jabez Pratt, L.S.A., Torrington-park.
Barnett, Lawrence, L.S.A., Swansea.
West, Charles James, L.R.C.P. Lond., Warwick-street.
Failes, Frederick George, L.S.A., Kings Lynn.
Baker, George Henry, L.S.A., Argyll-road, Kensington.
Brito, Philip Sebastian, M.B. Aberd., Ceylon.
Edginton, Alfred Dudley, L.S.A., Southampton.

Admitted on the 27th ult.:—

Browne, Harold Elliott, L.R.C.P. Lond., Wisbech, Cambs.
Hanson, Albert George, New South Wales.
Morgan, Edward Hume, New South Wales.
Harries, John Frail, L.S.A., Shrewsbury.
Davis, Edward Sandom Stone, L.S.A., Fowey, Cornwall.
Rothera, Frank, M.B. Ed., Nottingham.
Green, Chas. Robt. Mortimer, L.S.A., Morpeth-street.

Admitted on the 28th ult.:—

Blight, John Henry, L.R.C.P. Lond., Sladesbridge.
Cayley, Guthrie Neville, L.R.C.P. Lond., Windsor.
Booth, William Henry, L.R.C.P. Lond., Plymouth.
Smith, Frederick John, L.R.C.P. Lond., Bishopsgate.
Maynard, Frederic Pinsent, L.R.C.P. Lond., Barnes.
Walsh, Charles Lawrence, L.R.C.P. Lond., Oxford.
Armstrong, Hugh, L.R.C.P. Lond., Chalcot-crescent.
Tanner, Herbert, L.R.C.P. Lond., Bicester.
Creasy, Rolf, L.R.C.P. Lond., Ealing.
Garmany, Jasper Jewitt, M.D., Bellvue, Savannah, U.S.A.

Admitted on the 29th ult.:—

Nutting, Philip Henry, L.R.C.P. Lond., Warwick.
Woolmer, Shirley Lawrence, L.S.A., Charrington-street.
Wood, Edward, L.S.A., Tottenham.
Barrett, William Peard, L.S.A., Cheltenham.
Pedler, William Frederick, L.S.A., Tiverton.
Simmons, Harold, L.S.A., Ladbroke-grove-road.

The following candidates passed the Primary Examination in Anatomy and Physiology for the diploma of Member of the College at a meeting of the Board of Examiners on the 16th ult.:—

Anatomy and Physiology.—G. Oliver Richards and R. Baxter Booth, Charing-cross; Arthur Gervase Hendley, Arthur Bentham, and W. G. S. Brown, St. Bartholomew's; Jeremiah Penny, King's College; J. Albertus Exton and S. J. Cole, London; Cyril S. Davis, A. E. Poolman, W. E. Tressider, W. G. Brett, and J. E. Moyse, Guy's; A. J. Moss, Manchester; L. W. Powell, University College; Charles S. Vines, E. Lycett Cropp, and G. J. Harris, Westminster; C. F. Rilot and W. H. Charles, Middlesex; J. H. Fardon, Bristol; F. W. Parker, A. H. Ward and E. Le Cronie Lancaster, St. George's; J. C. Barr, St. Mary's; R. F. Walker, St. Thomas's.

Anatomy only.—Albert Pearse, St. Bartholomew's; E. Stock Bell, St. Thomas's.

Physiology only.—J. L. Johnston and C. H. Smale, Manchester; J. D. O'Sullivan, Dublin; H. B. Seddon, St. Thomas's; J. R. Gallard, London; A. Norman, Guy's; Frank Gilpin, Middlesex; H. Hanlton Coates, St. Bartholomew's.

(Candidates referred for three months, 2; six months, 4.)

Passed on the 17th ult.:—

Anatomy and Physiology.—W. H. Cooper, W. Wallis Ord, C. H. James, J. H. Lotlz, Frank Fowler, and H. H. Heffernan, St. Thomas's; H. W. Lewis, C. T. Boodlee Maltey, W. Wilfred Williams, Lewis Brown, G. L. Kemp, and Arlingham Carter, Guy's; C. Charan, Sen., and Charles Duer, University College; T. H. Clarke and John Maberly, Middlesex; Nugent E. Smyth, Birmingham; John Norton, Westminster; C. W. Ensor and W. Gostwyck Sargent, London; W. Byam Lane and T. Lakeman, St. Bartholomew's; S. E. Pedley, Charing-cross.

Anatomy only.—J. Mackenzie Bremner, King's College; W. H. F. Godwin, Westminster; Samuel H. Hughes and Frank Heasman, St. Bartholomew's; Nicholas Tyacke, Middlesex; G. H. Trenfield, Bristol; H. Cockerton, St. George's; G. R. Anderson, St. Thomas's.

Physiology only.—F. Price Drury and A. F. Tyrrell, Middlesex; T. Warne Sargent, London; P. Allison Linnell, Manchester; C. B. Seal, University College.

(Candidates referred for three months, 3; six months, 3.)

Passed on the 18th ult.:—

Anatomy and Physiology.—T. J. Dabell, W. Griffith Williams, T. E. Spencer, and Reginald Martyn, St. Bartholomew's; John Forster, William Powell, W. A. T. Twemlow, and A. H. W. Hunt, Westminster; J. Porter Parkinson, E. B. Hastings, R. Foster Gill, and J. E. Gould, University College; Charles H. Eccles, St. Thomas's; W. Heatley, Ernest Baly, and A. B. Davies, London; H. Carlos Barr, St. Mary's; W. J. Radford and J. G. V. Sapp, Charing-cross; G. C. B. Atkinson and W. Gifford-Nash, Middlesex; F. W. Pearce, Guy's.

Anatomy only.—Albert Lucas and C. R. B. Alexander, St. Bartholomew's; Edwin Webster, St. Thomas's; F. J. Oxley, London.

Physiology only.—F. J. Brown, Middlesex; J. S. Part, Westminster; G. T. Mould, St. George's.

(Candidates referred for three months, 6; six months, 1.)

Passed on the 20th ult.:—

Anatomy and Physiology.—L. T. F. Bryett, H. R. Henley, King's College; E. A. Snape, Charing-cross; E. O. Ashe and F. G. Twigg, London; G. Seymour and E. E. Lewis, Middlesex; R. A. Sawyer, Guy's; Charles J. Weekes, University College; C. W. Cooke, St. Thomas's.

Anatomy only.—G. John Cressy and R. Teale Wallace, Guy's.

Physiology only.—J. Conyers Bell and W. G. Thorpe, Guy's; Isaac G. Modlin, Newcastle.

(Candidates referred for three months, 3; six months, 5.)

[In the list of candidates who passed in Physiology on the 15th ult., for "Cartmil" read Cartmel.]

The Library of the College will be closed on Monday, Tuesday, and Wednesday, 4th, 5th, and 6th of May, at 4 P.M. each day, for the purposes of the examination in Medicine and Midwifery for the diploma of Member; and on Friday, May 8th, for the Primary Examination, 156 candidates having entered for that examination.

University of Durham.—At the recent examinations for the certificate of proficiency in Sanitary Science, the following satisfied the examiners:—

Roberts, James Reid, M.R.C.S., L.R.C.P.
Walker, Charles Pope, M.R.C.S.

For the above examination only two candidates entered. For the first examination for the degree of Bachelor of Medicine, of sixty candidates thirty-two satisfied the examiners.

University of St. Andrews.—The following registered medical practitioners having passed the required examinations, the degree of M.D. was conferred on them on April 24th:—

Anderson, John, M.R.C.S., L.S.A., Brigade-Surgeon Half-pay, London.
Davidson, Chas., M.R.C.S., F.R.C.S. Ed., L.K.Q.C.P.I., London.
Fenn, Edwin, M.R.C.S., L.S.A., Dover.
Knott, Sydenham John, M.R.C.S., L.S.A., London.
Marriott, Charles W., F.R.C.S. Ed., M.R.C.S., L.S.A., Surgeon-Major, A.M.D., Leamington.
Morgan, George, M.R.C.S., L. R.C.P. Ed., L.S.A., Pontypool.
Skelton, Henry, M.R.C.P. Ed., M.R.C.S., Downend, near Bristol.
Stott, William John, M.R.C.S., L.R.C.P. Ed., Haslingden.
Wickham, Richard Henry Brenton, F.R.C.S. Ed., F.R.C.P. Ed., Newcastle-on-Tyne.

The following gentleman also proceeded to the degree of M.D.:

Lowe, George, M.B., C.M. St. Andrews, Wymondham.

Royal Colleges of Physicians and Surgeons of Edinburgh and Faculty of Physicians and Surgeons of Glasgow.—The following candidates have passed the final examination for the triple qualification granted by the above-named bodies:—

Gordon, A. S., M.A., Edinburgh School.
Hill, Andrew, Glasgow School.
Laing, J. B., Glasgow School.
Spittel, Frederick George, Ceylon Medical School.

Faculty of Physicians and Surgeons of Glasgow. The following candidates passed the Final Examination at the April sittings of the Examiners, and were admitted Licentiates:—

Clark, S. P., Glasgow Royal Infirmary.
Modder, Eugene, Ceylon Medical College.
Malcolmson, John F., Dublin and Glasgow.
Plummer, Ed., King's College and Glasgow.
Rugg, J. Foster, L.R.C.P. Edin., St. Thomas's Hospital
Somerville, Wm., Anderson's College.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At meetings of the Court of Examiners held on April 7th and following days, the undermentioned obtained the diploma in Surgery of the College:—

Alfred George Beale, Jeremiah Beahan, Louis Aloysius Byrne, Robert George Christy, Thomas Codd, James Corcoran, Edward George Cotton, Patrick James Curtin, John Cuthbert William Daune, John Joseph Davoren, John Dawson, John Empson, Frederick Hall, Michael St. Lawrence Harford, Patrick Heelan, Arthur Joseph Hogan, George Edgar Hughes, John Keany, Henry T. Knaggs, David Humphreys, Reginald Levinge, Daniel McCann, James Douglas McDonagh, William Arthur Mahon, Matthew John Marmion, John O. Callaghan, John Rogers, William John Russell, Edmond Aloysius Ryan, Jeremiah B. Ryan, John Joseph Savage, James Albert Frederick Sawyer, Robert Dudley Alger Stone, Ernest Hastings Tweedy, Thomas F. Wade, Hugh Whelan, and John Whyte.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 23rd ult.:—

Gifford, George Taylor, King's College.
Hillier, Thomas Ernest, St. Bartholomew's Hospital.
Ritchie, Edward Duguid, St. Thomas's Hospital.

A TELEGRAM from Dongola announces the existence of an epidemic of small-pox at Omdurman.

WOOTTON WARREN, a small village near Leamington, with 700 inhabitants, is credited with having living in it seven persons whose united ages amount to 651 years, or an average of ninety-three years each.

A PORTRAIT of Dr. Fordyce Barker has been presented to the New York Academy of Medicine. The portrait, by Lazarus, represents the ex-president of the Academy in his Edinburgh academical robes, and is said to be an excellent likeness.

AT the Guildhall on the 29th ult., a butcher of Burgess-hill was sentenced to six weeks' imprisonment, without the option of a fine, for having sent four quarters of diseased meat to the London market, the same being unwholesome and unfit for human food.

ASSOCIATION OF PUBLIC SANITARY INSPECTORS.—The next meeting will be held at the rooms of the Social Science Association, Adam-street, Adelphi, on Saturday next, May 2nd, at 6 o'clock P.M. An address will be delivered by the President, Mr. Edwin Chadwick, C.B., entitled (probably) "A Review of the past Session."

AT a meeting of the Paddington Vestry on the 21st ult., it was decided, previous to affixing the seal of the Vestry to the contract for a new sewer, to obtain the opinion of a sanitary expert as to whether the sewer is required, whether it should be a brick or glazed stoneware pipe sewer, and what provision should be made for the ventilation of the sewer recommended.

THE METROPOLITAN ASYLUMS BOARD.—At the meeting of the managers of this Board on the 25th ult., another serious outbreak of small-pox in the metropolis was reported. The disease had a short time ago decreased to such an extent that it had been proposed to close the Western (Fulham) and North-Western (Hampstead) Hospitals, the wards of which were empty. In four weeks, however, no less than 874 cases have come into the hands of the medical officers, and there are now 1039 patients in the eight asylums. The motion for the closing of the two asylums mentioned was accordingly withdrawn.

AT a meeting of the City Commissioners of Sewers on the 28th ult., the Sanitary Committee presented a report stating that they had from time to time considered the question of the advisability of erecting a crematorium that the public might adopt that mode of sepulture should they so wish, and, in order to acquire every information on the subject, they requested the Court's authority to visit some place where the system was in operation, so that they might witness the cremation of a human body. Rome, Milan, or Gotha, were the places to one of which the Committee wished to proceed. The report was negatived by a large majority.

MIDLAND MEDICAL SOCIETY: PRESENTATION TO MR. HARMAR.—At the last meeting of the session, held at the Birmingham Medical Institute on Wednesday, April 22nd, Mr. Harmar, the late treasurer of the Society, who had held that office for eighteen years, was presented with a handsome timepiece, a pair of silver candlesticks, and an illuminated address, subscribed for by 163 members. The President (Mr. T. H. Bartleet), in making the presentation, spoke of the great services Mr. Harmar had rendered to the Society. The address, which was beautifully illuminated, was as follows: "To James Harmar, Esq., M.R.C.S., L.S.A. Dear Sir,—The members of the Midland Medical Society, on your resignation of office as treasurer, are desirous of expressing their sincere appreciation of the zeal, ability, and success with which you have discharged the duties of that office during a period of eighteen years." Affixed to the clock was a plate with an inscription also testifying to Mr. Harmar's valued services.

OXFORD GRADUATES' MEDICAL CLUB.—The chair at the next dinner of this Club is to be taken by Dr. John W. Ogle, of Trinity College, and, it being the anniversary meeting, only members of the Club will attend. The dinner is to take place on Thursday, May 21st, at 7.30 P.M., at Limmer's Hotel, George-street, Hanover-square. It will be remembered that the Club was started only last year, and it already numbers more than one hundred members, a very large proportion of these practising medicine or surgery and holding Oxford degrees. The Secretaries are Dr. Samuel West and Mr. J. H. Morgan, and those intending to be present should forward their names to one of these gentlemen.

HOSPITAL SUNDAY AT ROCHESTER.—Hospital Sunday has been observed as usual in Rochester and Chatham by the Mayor and Corporation attending the Cathedral in state. There were large congregations at both services, as well as at other places of worship in the neighbourhood where sermons were preached in behalf of the fund. At St. Bartholomew's Hospital, Chatham, more than 12,000 patients have received treatment during the past year, and these have come from sixty-one different parishes. The superintendent of St. Paul's Sunday School, writing to the local press, says that by encouraging children to bring their pennies on Hospital Sunday he has collected seventeen or eighteen shillings a year for the fund, and he suggests that this plan might be generally adopted in Sunday schools belonging to both churches and nonconformist places of worship, with the result of considerably augmenting the collections already made.

UNIVERSITY OF CAMBRIDGE.—The preliminary notice of the dates of the examinations for Medical and Surgical Degrees, for Easter term, 1885, has been issued. For the degree of Bachelor of Medicine, the first examination will begin on June 5th, the second on June 9th, and the third (Parts I. and II.) on May 12th and 13th; for the degree of Bachelor of Surgery, on May 16th; for the degree of Master of Surgery, on May 15th and 16th. The names of candidates for the third examination and for the examinations in Surgery must be sent to the prælectors of their respective colleges on or before May 4th; those for the first or second examinations on or before May 26th. The certificates of candidates, accompanied by their postal addresses, must be sent to the Secretary, not less than seven days before the beginning of the examination for which they are entered. The fees for the examination must be paid to the Registrar of the University before the certificates are sent in.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAKER, THOMAS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the First District of the Havant Union.

BENNETT, E. A., L.R.C.S.Ed., L.S.A.Lond., L.M.Ed., has been appointed Honorary Surgeon to St. Mary's Cottage Hospital, Southampton, vice Wilme, deceased.

CHAPMAN, GEORGE, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Yoxall District of the Lichfield Union, vice Ramsden.

FERNANDEZ, EDWARD J., L.R.C.P., L.R.C.S., L.M., has been appointed Medical Officer of Health and Port Surgeon under the Bombay Government at Perim Island, Red Sea, Arabia.

FOORD-CLARK, HARRY, L.R.C.P., L.R.C.S., L.M.Ed., has been appointed Government Medical Officer and Public Vaccinator to the Town and District of Moree, New South Wales.

FOWLER, TREVOR, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Nazeing District of the Epping Union, vice Priest.

HANDFORD, HENRY, M.D., M.R.C.P., has been appointed Physician to the General Hospital, Nottingham.

HELM, ROBERT DUNDAS, M.B. & C.M.Ed., has been appointed Resident Physician to the Royal Hospital for Sick Children, Edinburgh.

MCCRACKEN, JOHN, M.B., M.Ch.Glas., has been appointed Medical Officer for the Kilburn District of the Thirsk Union, vice Stevens.

MACKENZIE, HECTOR WILLIAM GAVIN, M.A., M.B.Cantab., has been appointed Resident Assistant-Physician at St. Thomas's Hospital, vice Percy Smith, M.D., resigned.

MARR, JOSEPH BELL, L.F.P.S.Glas., L.R.C.P.Ed., has been appointed Health Officer for the Shire of Ballan, Victoria.

MYDDELTON-GAVEY, E. H., M.R.C.S. & L.S.A.Lond., has been appointed House-Surgeon at the Leeds General Infirmary.

PARRY, GEO. HALES, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Dorking District and Workhouse, Dorking Union, vice Batson.

POPE, PERCY, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Fourth District of the Havant Union.

ROBINSON, ARTHUR HENRY, M.D.Dur., M.R.C.S., has been appointed Medical Superintendent of the Infirmary, and Medical Officer of the Workhouse and Schools, Mile-end Old Town Hamlet.

SMITH, PERCY, M.D., has been appointed Assistant Medical Officer to Bethlem Royal Hospital.

SYMONS, GEO. FRANCIS, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Third District of the Newton Abbot Union.

WHITELEY, GEO. WILLIAM, L.R.C.P.Ed., L.R.C.S.Ed., M.R.C.S., has been appointed Medical Officer for the Second District of the Alderbury Union.

Births, Marriages, and Deaths.

BIRTHS.

BEAUMONT.—On the 24th ult., at Shirley, Southampton, the wife of Charles G. Beaumont, M.D., of a daughter.

BUNN.—On the 25th ult., at Ferndale, Upper Norwood, the wife of C. Grinling Bunn, L.R.C.P., M.R.C.S., of a son.

HINE.—On the 23rd ult., at Eppingdale, Leytonstone-road, the wife of A. Leonard Hine, L.R.C.P., M.R.C.S., L.S.A.Lond., of a son.

NORTON.—On the 28th ult., at Upper Gloucester-place, the wife of G. Everitt Norton, M.R.C.S. &c., of a daughter.

STOCKS.—On the 22nd ult., at Courland, Wandsworth-road, London, S.W., the wife of Frederick Stocks, M.R.C.S., of a daughter.

MARRIAGES.

HARE—CUMMINS.—On the 23rd ult., at St. Paul's, Brentford, Evan Herring Hare, M.A., M.R.C.S., son of Evan Hare, of Kew, to Emily Lucy, daughter of the late Richard Norris Cummins, of Mortlake.

HIGGENS—GREENWOOD.—On the 22nd ult., at Titchborne, Hants, by the Hon. and Rev. Everard Arundell (cousin of the bride), Charles Higgens, F.R.C.S., 38, Brook-street, W., Ophthalmic Surgeon to Guy's Hospital, to Evelina, eldest daughter of the late Colonel Greenwood, of Brookwood Park, Hants.

KNOTT—HOLMES.—On the 23rd ult., at St. Andrew's Church, Higher Blackley, near Manchester, by the Rev. E. Parker, William Knott, surgeon, of Waterhead, Oldham, to Aimée, only daughter of E. Holmes, Esq., Boothroyden, Manchester.

MATTHEWS—VEVERS.—On the 20th ult., at Holmer Church, Samuel Richard Matthews, M.D., of Hereford, to Maria Elizabeth (May), youngest daughter of Henry Vevers, Esq., of Highmore House, Hereford.

MACQUEEN—COMBERBACH.—On the 22nd ult., at Huyton Parish Church, Thomas MacQueen, M.B., C.M., of Eastbourne, to Edith Mary, youngest daughter of Robert S. Comberbach, of South Park, Huyton.

MOTT—SOLEY.—On the 22nd ult., at Christ Church, Sefton Park, Liverpool, by the Rev. Henry Coote, A.B., Rector of Donaghadee, Fredk. Walker Mott, M.B., B.S.Lond., to Georgiana Alexander, daughter of the late George Thomas Soley, Esq., of Parkfield-road, Liverpool.

RINGER—RICH.—On the 16th ult., at Hardwicke, Aylesbury, by the Rector, the Rev. W. Bigg-Wither, assisted by the Rev. Newton B. Young, Rector of Tillbrook and Rural Dean, Deputy Surgeon-General Theobald Ringer, late 7th Bengal Cavalry, son of the late William Ringer, Esq., of Laugharne, Carmarthenshire, to Frederica Adela, eldest daughter of the Rev. Henry Rich, Great Alne, Alcester, Warwickshire, and formerly Curate of Hardwicke-cum-Weedon.

DEATHS.

ANDERSON.—On the 28th ult., at Abingdon-road, Mark French Anderson, L.R.C.P.Ed., M.R.C.S., in his 51st year.

BLAKEMORE.—On the 19th ult., at his residence, Montpellier-road, Brighton, William Blakemore, F.R.C.S., late of Grosvenor-street, son of the late William Blakemore, of H.M. Exchequer.

CAUNT.—On the 19th ult., at Dudley-place, Paddington, John Caunt, M.R.C.S., formerly of Nottingham, in his 82nd year.

CRERAR.—On the 1st ult., at the Royal Military Asylum, Chelsea, James Crerar, Deputy Surgeon-General.

DIXON.—On the 25th ult., at Lansdowne-terrace, West Brighton, Joseph Dixon, M.R.C.S. and L.S.A.Lond., aged 62.

DUNCAN.—On the 22nd ult., at 6, Harley-street, Cavendish-square, W., after a few days' illness, Ada Mary, the loving and much-loved wife of William A. Duncan, M.D., F.R.C.S.Eng., aged 28.

EDMONDS.—On the 22nd ult., at Fowey, Cornwall, Fredric Edmonds, M.D., F.R.C.S.E., late of Guanajuato, Mexico, aged 75.

FRANKS.—On the 19th ult., at Billesdon, Leicester, William Francis Franks, M.R.C.S., L.S.A.Lond., aged 71.

GARDINER.—On the 23rd ult., at Wimpole-street, G. G. Gardiner, M.D., also of Finsbury-circus, aged 49.

GLEADALL.—On the 22nd ult., at his residence, St. George's Villa, Sheffield, James Gleadall, F.R.C.S., in his 67th year.

INNES.—On the 23rd ult., at Lyndhurst-road, Hampstead, Surgeon-General Francis William Innes, C.B., aged 73.

WHITELOCK.—On the 27th ult., at Chalcot-crescent, Regent's-park, Surgeon-Major Thomas William Whitelock, in his 70th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

Medical Diary for the ensuing Week.

Monday, May 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—5 P.M. General Monthly Meeting.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Casual communications by Messrs. E. Lloyd Williams, F. I. Hutchinson, W. A. Hunt, David Hepburn, and C. W. Dunn of Florence (per Mr. Storer Bennett, Hon. Sec. Foreign Correspondence).—Dr. W. St. George Elliott: Bridge Work, with Remarks on Electro Motors.

Tuesday, May 5.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Charlewood Turner: (1) Tumour of the Brain; (2) Posterior Sclerosis of the Cord (card).—Dr. Norman Moore: Malignant Disease of the Cranial Bones in a Child.—Dr. Dyce Duckworth: Sarcoma of the Lung and Brain in a Child.—Dr. G. N. Pitt: The Viscera of a Syphilitic Infant.—Dr. Payne: Varicella Gangrenosa.—Mr. Paul: A group of cases of Primary Carcinoma of the Liver.—Dr. Goodhart: Cirrhosis simulating Cancer of the Liver (card).—Mr. Shattock: Actino-mycosis of the Liver (card).—Mr. Bilton Pollard: Callus of Tibia and Fibula.—Dr. Hadden: Chronic Cerebro-spinal Meningitis.—Mr. Sutton: Typhoid Fever in Animals.—Mr. Battle (for Mr. Croft): (1) Primary Sarcoma of the Kidney (card); (2) Fistula between Small Intestine and Bladder (card).—Mr. Doran: Pedunculated Fibroma on the Outer Wall of an Ovarian Cyst (card).—Mr. D'Arcy Power: Three Specimens of an Encysted Hernia (card).—Dr. Percy Kidd: (1) Intercalar Ulceration of the Tongue (card); (2) Small Fibroma of Cæcum (card); (3) Tubercular Ulceration of the Tongue (card) (for Mr. H. H. Taylor).—Mr. Churchill: (1) Congenital Papillomata of Mouth and Neck (card); (2) Acute Ostitis of Tarsus.

Wednesday, May 6.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Specimens will be shown by Dr. Horrocks and others.—Dr. Matthews Duncan: On the Ulceration of Lupus of the Female Generative Organs.—Dr. W. H. Day: Case of Uterine Fibroid complicating Labour treated by Enucleation.—Dr. John Williams: On Serous Perimetritis.

Thursday, May 7.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. M. Handfield Jones: Notes on a case of Porro's Operation, with Specimen.—Dr. A. de Watteville: Methods of Electrical Diagnosis in Nervous Diseases.

Friday, May 8.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

MEDICO-PSYCHOLOGICAL ASSOCIATION.—2.30 P.M. Council Meeting.—4 P.M. Quarterly Meeting. A resolution will be proposed to express the feeling of the Association on the retirement of Lord Shaftesbury from the Lunacy Commission. The provisions of the proposed Lunacy Amendment Bill.

CLINICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Hadden: A case of Obstruction of the Arteries and Veins extending over many years.—Mr. J. R. Lunn: Osteitis Deformans.—Dr. Cayley: A case of Hæmoptysis treated by the Induction of Pneumothorax so as to Collapse the Lung.—Mr. Charles Symonds: A case in which, at the request of the late Dr. Mahomed, a Calculus was removed from the Vermiform Appendix for the relief of recurrent Typhlitis.

ROYAL INSTITUTION.—9 P.M. Mr. W. F. R. Weldon: On Adaptation to Surroundings as a Factor in Animal Development.

Saturday, May 9.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

METEOROLOGICAL READINGS.

(*Taken daily at 8.30 a.m. by Steward's Instruments.*)

THE LANCET OFFICE, April 30th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Apl. 24	29·65	S.W.	52	48	84	60	45	·18	Cloudy
„ 25	29·37	S.W.	55	51	105	61	50	·07	Stormy
„ 26	29·54	S.	55	50	106	62	49	·05	Cloudy
„ 27	29·71	E.	56	51	97	64	50	·03	Hazy
„ 28	29·75	S.W.	57	51	109	67	47	...	Hazy
„ 29	29·66	S.W.	54	50	104	65	50	·54	Cloudy
„ 30	29·87	N.	53	49	84	60	44	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

AN OLD POOR-LAW MEDICAL AGREEMENT.

To the Editor of THE LANCET.

SIR,—Perhaps the following extract from the meetings of the Vestry of West Coker, Somerset, giving the terms of agreement for the "parish doctor," may be of sufficient antiquarian interest as to merit insertion in your columns. It is the earliest notice of the kind that I have seen. Like the present arrangements with the Local Government Board, it will be seen that midwifery and compound fractures are "extras."

I am, Sir, yours faithfully,

West Coker, Somerset, April 27th, 1885. JNO. EADIE.

"1778, May 18th.—At a vestry legally held it was agreed on the part of the parishioners to advance yearly the sum of five guineas to Mr. Shorland of Yeovil for the following purpose: that is to say, that he, the said Mr. Shorland, shall give due and necessary attendance on the poor of this parish when required, and lend them when needful his good assistance as a surgeon and apothecary, compound fractures and midwifery excepted in the first and small-pox in the latter; and Mr. Shorland on his part doth promise faithfully to fulfil the above when required."

(Here follow the signatures.)

Another extract:—

"24th April, 1786.—This agreement then ceased."

"AGORAPHOBIA."

To the Editor of THE LANCET.

SIR,—In reply to Dr. Evans's question in your last issue concerning the treatment of agoraphobia, allow me to refer him to my letter on this symptom in THE LANCET of Jan. 17th last. The best prescription for this disagreeable state of things is a mixture of bromide of potassium with sal volatile. Walking at night is, I find, in these cases much less dreaded than walking in the glare of the day; and by degrees the muscles of the limbs become firmer and more developed, and a general healthy tone takes the place of the former miserable condition of nervousness.

I am, Sir, yours faithfully,

Richmond-terrace, S.W., April 27th, 1885. H. SUTHERLAND.

To the Editor of THE LANCET.

SIR,—In answer to Dr. Evans, I may say that I have found the above condition to be a very frequent, and sometimes the only, symptom of a neurasthenic state characterised by loss of vaso-motor tone and an increased quantity of urea in the water passed by the patient. I have had a considerable number of such cases lately under my care, and, with one or two exceptions, have found that the patients have completely recovered their health in periods varying from a week to a month under the internal administration of three grains of valerianate of soda three times a day, and systematic vibration of the peripheral nerves with the electro-percuteur. I shall be happy to give Dr. Evans any further information he may desire upon the subject.—Yours truly.

Moorgate-st., E.C., April 27th, 1885. GEO. HERSCHELL, M.D.Lond.

"THE PRIMROSE."

THE first number of an amateur monthly magazine christened *The Primrose*, and published on April 19th in honour and commemoration of the late Lord Beaconsfield, has recently appeared. We understand that the magazine is intended for private circulation, and with a view of adding to the funds of the National Aid Society for the care of the sick and wounded in the Soudan. The first number contains many little stories and fragments of an amusing kind. Copies of the magazine may be ordered of A. Wilson Fox, Esq., 67, Grosvenor-street, or of C. L. Sclater Booth, Esq., 74, St. George's-square, London, S.W.

Dr. Golaub Sing is referred to some remarks which appear on another page.

REAL DISEASE OR MALINGERING?

To the Editor of THE LANCET.

SIR,—About a fortnight ago I was asked by a patient to examine a servant in his employment. She was nineteen years of age, and was described as a steady, industrious girl. She complained of palpitation of the heart, with periodical attacks of syncope. I elicited that she had had rheumatic fever, and was subject to irregular and excessive menstruation. But the symptom which caused her employers the greatest uneasiness was the markedly cyanotic appearance of her lips whenever she was seized with one of these attacks. When I saw her, her lips were of a normal colour. Her pulse was slightly irregular in rhythm, but more so in volume. On examination, I detected a very slight mitral systolic murmur. Her lungs were sound. I noticed no embarrassment in her breathing, nor was there any anasarca; the urine was found to be free from albumen. I communicated my diagnosis to the girl's master and mistress, and expressed my ignorance as to the cause of the cyanosis, telling them that, in my opinion, the lesion of the heart had not produced sufficient disturbance in the pulmonary circulation to produce such an advanced symptom. Four days ago I was summoned to see the girl, as she was very much worse. I found her in bed; her face was very pale, and her lips were of a cobalt blue. Examination revealed that the inside of the lips was of the natural colour. With the aid of a moistened towel I proceeded to restore the natural colour to the outside of the lips, and transferred the cyanosis from the lips to the towel, on which I discovered traces of previous attacks of cyanosis. I then informed her employers that it was a case of "fiction founded on fact," and that the girl, through hysteria or for the purpose of malingering, had had recourse to Nature to supply a symptom of which she deemed herself deficient. This they cannot, and will not, believe, remarking that the girl has never sought to profit by her cyanosis, and that a careful examination of her effects had failed to discover the wherewithal for the fraud. The girl, who is very intelligent, has, to me and to her employers, strenuously and in the most indignant manner denied the truth of my statement.

I would esteem it a great favour if in your next issue you would inform me whether my opinion is capable of error in this case, and whether there is really any morbid state capable of producing a cyanosis susceptible of cure by soap and water. You would thus satisfy me, and I would be enabled to satisfy my patients.

I am, Sir, yours faithfully,

FREDK. W. FRIEND,

Hon. Surgeon, Isle of Man General Hospital.

Douglas, Isle of Man, April 20th, 1885.

CONTAGIOUS DISEASE CARDS.

To the Editor of THE LANCET.

SIR,—At page 677 of THE LANCET of April 11th there is a paragraph stating that Mr. Adams "has devised a card" which "embodies a neatly-drawn-up chart, and indicates the presumed normal periods of latency, premonitory fever, duration of pyrexia, and of infectiveness" of certain contagious diseases. "It is issued by Messrs. Churchill." I think it is only right that attention should be called to the fact that the figures given by Mr. Adams were previously published in the *Health Journal* of March, 1884, accompanied by a coloured chart, and that the figures and chart were shortly afterwards republished in a pamphlet issued by Mr. Heywood at 6*d*.

I am, Sir, your obedient servant,

Chester, April 18th, 1885. G. A. KENYON.

⁂ We think it only due to Mr. Francis Vacher, the author of the pamphlet referred to by our correspondent, to insert the above. So far as the chart and tables go, the similarity between the two is absolute; and it is to be regretted that Mr. M. A. Adams has not acknowledged the source from which he apparently derived not merely the idea, but the actual figures of his "card." Mr. Vacher's pamphlet contains the evidence upon which these figures are based, and is well worthy of perusal.—ED. L.

"IS ALCOHOL A FOOD?"

To the Editor of THE LANCET.

SIR,—In my paper on the above subject, which you were kind enough to publish last week, I notice a printer's error, which I trust you will allow me to correct. In page 744, twenty-third line from the bottom of the first column, instead of "sulphate or oxide of chromium" read "sulphate *of* oxide of chromium.—I am, Sir, yours truly,

Potter's Bar April 27th, 1885. T. W. THOMPSON.

SPURIOUS CUBEBS.

To the Editor of THE LANCET.

SIR,—A few days ago a patient of mine who had been taking cubeb powder called on me, complaining of its having made him feverish, with sickness and purging. He looked wretchedly ill and weak; the pulse was feeble, the tongue very much coated, and he had general aching pains all over. He told me that he had taken the powder for a week without its disagreeing with him; then he had to buy some more. The new sample had a more acrid and unpleasant taste, and gave rise to nausea, followed by diarrhœa, &c. He persevered with it for three days, when he became so ill that he could not go to business. He attributed his present condition entirely to the new cubebs, which he brought for me to see. On comparing it with a sample procured at Messrs. Corbyn's, I found that it was lighter in colour, and that on crushing some of it on a sheet of white paper lighter streaks were seen amongst the general brown. The smell was drier, less aromatic, and the taste hotter, more peppery, with less of the aromatic cooling pungency of pure cubebs. It appeared certain that this sample was adulterated with some powder possessing acrid and irritant properties. On inquiring amongst the wholesale houses, I found that a spurious berry had lately been offered for sale under the name of cubebs, and that a certain quantity had been sold; and I feel sure, on comparing the berry with the adulterated powder, that it was mixed with it. I understand that these spurious cubeb berries were offered for sale in the French markets, but were seized by the authorities. The berry somewhat resembles cubebs in its external character, being wrinkled and stalked, but it contains a single hard seed; it is not a pepper, but is the berry of a species of laurel from West Africa. I may add that my patient soon recovered, and is now taking cubeb powder without any bad effect, so that it is clear his recent indisposition was caused by the adulterated sample.

The consideration of this gross example of adulteration shows how impossible it is for us to depend upon the present system of Government inspection, for the bags of spurious cubebs were publicly offered for sale without any hindrance from the authorities, although Mr. Holmes called attention to them in the *Pharmaceutical Journal*. The subject is one of great importance, and I hope that we may look forward to some more perfect means for preventing the wholesale adulteration of drugs than at present exists; for surely it is as important to have the supplies at the drug brokers inspected as it is to test a few drops at the retail chemist's.

I am, Sir, yours faithfully,

Frederick-place, Old Jewry, April 27th, 1885. BUXTON SHILLITOE.

Mr. F. P. Smith (Shepton Mallet).—The firm in question has acted in accordance with the practice of high-class publishers.

"TRANSVERSE HERMAPHRODITISM."

To the Editor of THE LANCET.

SIR,—In THE LANCET of April 25th Mr. J. H. Morgan is reported to have said, in the discussion on a case of Hypospadias at the Pathological Society, that he was uncertain whether the mixture of external and internal organs of different sexes in the same individual had ever been observed. In the last bulletin of the Anatomical Society of Paris will be found the report on such a case. The specimen is in the Museum at Paris. It was that of a full-grown fœtus which died during protracted delivery, and which I dissected, fully believing that it was a male. The penis was well formed but for slight hypospadias, and the scrotal raphé was very marked. The bulb and prostate were extremely well developed, and into the latter opened a vagina, above which were a perfect uterus, ovaries, Fallopian tubes, &c. The other viscera were normal. So far as I have been able to ascertain, this is the first dissected specimen in this country; but cases have been recorded in France in which such a strange condition (well expressed by the term "transverse hermaphroditism") must have existed. Thus M. Petit was consulted by a married man who was sterile, and who had a flow of blood from the urethra every month; so that it is plain that if my case had attained adult life he would have presented no external appearances hindering him from being married. There is no note as to the state of the mammæ in M. Petit's case, but they could not have been large. See also M. Bouillaud (*Journal Hebdomadaire de Médecine*, tome x., p. 406). Transverse hermaphroditism as a rare cause both of sterility and of hæmaturia is worth being kept in mind.—I am, Sir, yours truly,

Cavendish-square, April 27th, 1885. J. HUTCHINSON, Junr.

Mr. G. Heaton.—In 1883 the births of males in England and Wales were 103·5 to 100 of females. The numbers for the United Kingdom are not yet available.

Zero.—We are not aware that anything has been done in the matter to which our correspondent refers.

"CORONERS AND POST-MORTEM EXAMINATIONS IN WORKHOUSES."

To the Editor of THE LANCET.

SIR,—Your Liverpool correspondent, under the above heading, calls attention to the "Croydon Workhouse case" in your issue of April 25th. In all the published reports of the case which I have read, and I think I have perused nearly all of them, the judge was careful to use the word "workhouse infirmary," and not simply "workhouse"—a distinction which carries a great difference.

I am, Sir, yours faithfully,

April 27th, 1885. A MEDICAL OFFICER.

RINGWORM.

To the Editor of THE LANCET.

SIR,—All of us will agree with Mr. Alder Smith when he asserts, in speaking of tinea capitis, that he "considers it extremely difficult to certify that a child who has had ringworm is absolutely well" (THE LANCET, January, 1880); but one rarely has the same experience in mild cases of the disease attacking other parts of the skin. In fact, if no spores are to be found in the epidermis scraped off the spot at the end of two weeks after treatment has been discontinued, it has always been, under ordinary circumstances, in my experience, safe to permit the child to mingle with its companions, and resume school work. That this, however, is not invariably a course free from risk the following case has lately shown me. A little boy, on Feb. 17th last, was observed to have a red spot on the outer side of the right eye. As it increased in size, he was sent to me on the 19th, when it had reached the size of a sixpence; the margin was slightly papular and red, and the centre was much paler and somewhat scaly. The epidermis scraped off and soaked in liquor potassæ showed under the microscope plenty of ringworm spores. After a few days' treatment no spores could be seen. The treatment was discontinued on March 1st. On the 5th there were no spores, the spot appearing almost natural; and a week later the same condition was noted. The child resumed the companionship of his brothers, but had separate toilet arrangements and bed. On April 17th he came again to me. On the outer edge of the old spot a small red papule was seen, and under the microscope a few conidia were found in the epidermis scraped from it. In fact, the ringworm had recurred after five or six weeks of apparent absence on the face of a thin-skinned child, who had not another spot on him, and who had not been exposed to any fresh infection that could be discovered. I may remark that there is much fine downy hair all over the skin, such as is not uncommon in a certain type of children, and the germ that revived probably found a safe hiding-place deep in some of the hair follicles.

The above case has only been narrated with the object of eliciting the observations and experience of others as to the interval after which it is safe to allow a child who has had mild ringworm (not affecting the scalp) to return to school and family life. The fortnight, which I have always considered enough after treatment has been left off and the case apparently cured, appears to be, at all events in some cases, insufficient.

I am, Sir, yours faithfully,

East Twickenham, April 23rd, 1885. H. HOWARD MURPHY, M.D.

"DISINFECTING CHAMBERS."

To the Editor of THE LANCET.

SIR,—Permit me to inform "A Medical Officer of Health," in answer to his question under the above heading in your issue of April 18th, that I think he will find Dr. Scott's disinfecting apparatus a most efficient one. It is made by Maguire and Son, of Dawson-street, Dublin, who have been awarded prizes and diplomas of merit for it at various exhibitions where it has been shown. In Dublin it is used at the Cork-street Fever Hospital and at the Rotunda Lying-in Hospital, and gives satisfaction. I believe it has been supplied to several union districts and townships both in England and Ireland, as well as to the War Department for use in military hospitals. One of the chambers is, I know, at the Herbert Hospital, Woolwich, and there is another at Blackpool. By means either of gas or of a coal and coke furnace a temperature of 300° F. can readily be obtained and maintained in them as long as requisite.

I am, Sir, yours truly,

GEORGE F. DUFFEY, M.D. Dub.,
Vice-President, King and Queen's College of Physicians,
Dublin, April 24th, 1885. Ireland.

To the Editor of THE LANCET.

SIR,—In reply to "A Medical Officer of Health," I would beg to draw his attention to Dr. Scott's Patent Self-regulating Gas or Coal Disinfecting Chambers, awarded a gold medal in Dublin, and several special prizes at London and other exhibitions. Several improvements have been recently added, partly on the suggestions of the authorities most interested, and partly from actual experience. An arrangement is made whereby the heated air is caused to circulate within the chamber to maintain even temperature throughout. An appliance is also added by which hot air is forced into the interior of mattresses and feather beds. The various improvements render Dr. Scott's invention the best, the safest, the easiest worked, and the most economical in fuel. The regulator turns down the gas when the desired temperature is reached, and no gas is wasted. A very large number have been supplied to Government and other institutions.

I am, Sir, yours truly,

Dublin, April 22nd, 1885. WM. ROBT. MAGUIRE, F.R.M.S.

Mr. T. H. Buckler (Biarritz).—We have nothing to add to our remarks published in THE LANCET, vol. ii., 1882, page 851.

"AUTUMNAL STONE."

To the Editor of THE LANCET.

SIR,—Could any of your readers give me any information about the "autumnal stone"? It is like a piece of white marble. Does it possess any medical properties? It is kept in cotton wool in a stoppered bottle, and has on the bottle the words "Wuhu No.," with some Chinese writing on. It was given to me by a friend, and came from abroad.

I am, Sir, yours respectfully,

Conway, April 23rd, 1885. ROBERT JONES, Surgeon.

Dr. Sargent (Shadwell).—Although the unregistered practitioner referred to by our correspondent has no legal right to use the official form of medical certificate issued by the Registrar-General "for the use of registered practitioners only," we fear that there is no legal penalty incurred by such misuse of the document, since the unregistered practitioner is careful to guard against any pretence of being registered, which would be a punishable offence. Forms are only issued to persons *supposed to be registered practitioners. A certificate signed in such a* manner as the one *enclosed by our correspondent would not be* accepted as a legal certificate by the local registrar, and the cause of death would be entered in the death register as uncertified.

Mr. E. Shoesmith (Rochdale).—So far as we know, data are wanting to show whether injurious results follow the constant use of salicylic acid as a preservative of animal food.

A. B. has not enclosed his card.

AFTER-CARE OF MENTAL CONVALESCENTS.

To the Editor of THE LANCET.

SIR,—The Ladies' Committee of the Association for the After-care of Poor and Friendless Female Convalescents on Leaving Asylums for the Insane propose holding a bazaar at the Town-hall, Kensington, on Tuesday, May 19th, and the following day, in order to raise funds towards the *opening of a Home for Mental Convalescents. Contributions* may be forwarded to Mrs. Ellis Cameron, 27, Church-street, Kensington, or to me. I am, Sir, yours obediently,

HENRY HAWKINS, Hon. Sec.

Chaplain's House, Colney Hatch, N., April 27th, 1885.

*** This is an excellent charity, and deserves sympathy and practical help.—ED. L.

CASCARA SAGRADA.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers can inform me whether cascara sagrada possesses two principles, one an hepatic and the other an intestinal stimulant, so that the difference in the action of the two preparations might be explained by the removal during manufacture of one or other of them, or their presence in different proportions in the crude drug. I am, Sir, yours truly,

Glan Menai, Llandudno, April 28th, 1885. T. L. K. DAVIES, M.B.

Late Assistant.—The original letter cannot now be recovered. If our correspondent will repeat his inquiry and append his name, we will endeavour to answer his question.

A M.O.—We cannot decide the question.

Inquirens.—The spirituous tincture should be used.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Mr. Buxton Shillitoe, London; Dr. C. E. Saunders, London; Dr. De Watteville, London; Mr. Reginald Harrison, Liverpool; Dr. Luke Armstrong, Newcastle-on-Tyne; Dr. Thin, London; Mr. A. T. Bentley, Manchester; Mr. A. Field, Bradford; Dr. Shirtliff; Dr. Cartwright Reed, Douglas, Griqualand; Dr. Musser, Philadelphia; Dr. Althaus, London; Dr. H. Sutherland, London; Dr. Massy; Dr. Illingworth; Dr. Edge, Salford; Mr. Harvey, London; Mr. Jackson, Somerby; Mr. W. M. Maguire, Dublin; Mr. Pilkington; Dr. H. M. Murphy, Twickenham; Mr. Wm. Donovan, Birmingham; Mr. R. Jones, Conway; Mr. D. T. Richard, Ton Pentre; Mr. Kershaw, London; Mr. A. B. Gemmel, Greenock; Dr. Munro, Jarrow; Dr. Duffey, Dublin; Mr. Collings, Guernsey; Dr. Eadie, West Coker; Dr. Sargent, London; Dr. Eben Watson, Glasgow: Mr. Limont, Newcastle-on-Tyne; Mr. Snell, Sheffield; Mr. Jas. Hardie, Manchester; Dr. J. C. Murray, Newcastle-on-Tyne; Mr. T. F. Chavasse, Birmingham; Dr. O'Dwyer, Gimdagal; Mr. Saberton, Manchester; Mr. Davies, Glan Menai; Mr. Banks, London; Mr. F. C. Montague, London; Mr. Moore, Port Royal, West Indies; Rev. J. Wright; Messrs. Dolman and Co., Haverstock-hill; Messrs. Pemberton, Manchester; Messrs. Wood and Co., New York; Mrs. George, Malvern; Messrs. Maguire and Son, Dublin; Mr. J. Carter, London; Miss Rolliston, Leicester; Messrs. Byles and Sons, Bradford; Mr. Rodgers, Nottingham; Mr. Rodgers, Binghampton, U.S.A.; Dr. Thomas, Glasgow; Mr. Somerville, Edinburgh; Mr. Wagstaff, Sneinton; Dr. Willey, Sheffield; Mr. Banks, Edinburgh; Messrs. Mackay, Edinburgh; Messrs. Macmillan and Co., Cambridge; Miss Haslam; Dr. Copbold, Lyme Regis; Mr. Medmaine, Newcastle; Messrs. Mulliner and Co., Northampton; Mr. Keeting, Manchester; Mr. Davey; Mr. Durham, London; Mr. Anderson, Glasgow; Miss Pudney, Leicester; Messrs. Oppenheimer and Co., London; Messrs. Eggington and Son, Reading; Messrs. Griffin and Co., London; Mr. Bendley, London; Messrs. Essinger and Co., London; Messrs. Atkinson and Co., Kendal; Dr. McDonald, Dorchester; Messrs. Macmillan and Co., London; Messrs. Slinger and Son, York; Mrs. James, St. John's Wood; Mrs. Carless, Liverpool; Mr. Russell, Liverpool; Mrs. Markham, Portsmouth; Mr. Haggard, Geneva; A M.O.; A. B., Liverpool; Medicus, Liverpool; Spes, Peterborough; L.R.C.P., Manchester; W.; Sartorius; A Patient.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Cornish; Mr. Barnes, Knightsbridge; Mr. Gray, Cannock; Mr. Billycald, Nottingham; Mrs. Griffith, London; Mrs. Henbrough, Waltham; Dr. Sykes, Southsea; Mr. Saunders, Camden-town; Mr. Cuckson, Gainsboro'; Mr. Parsons, Hastings; Mr. Darke, London; Mr. Knott, Oldham; Mr. Hodgson, London; Mr. Field, Bradford; Mr. Moore, Linkinhorne; Messrs. Richards and Co., London; Mr. Puddicombe, Portsmouth; Messrs. Kilner Bros., London; Messrs. Squire and Co., London; Mr. Field, Bradford; Dr. Needham, Gloucester; Mr. Crisp, Keynsham; Mr. Leiterschofen, Homburg; Messrs. Porteus and Co., Glasgow; Mr. Newsholme, Sheffield; Messrs. Bywater and Co., London; Mr. Clark, Thetford; Dr. Duncan, London; Mr. Fage, Taunton; Mr. Dingle, Barnstaple; Messrs. Oliver and Boyd, Edinburgh; Dr. B. Squire, London; Dr. Hawthorn, Uttoxeter; Mr. White, Bayswater; Commander Blount, R.N., Chelsea; Mr. Marret, Childe Woodford; Mr. Fleet, Westgate-on-Sea; Mr. Waite, Devonport; Mr. Palmer, Eardesley; Mr. Barrows, Notts; Mr. Brown, Westgate-on-Sea; Dr. Eberle, Thirsk; Dr. Seaton, Sunbury; Miss Ohreinan, Kensington; Dr. Martin; Mr. Simpson, Hoxton; Messrs. Merritt and Hatcher, London; Mr. Morgan, Stoke Newington; Mr. Laird, Birkenhead; Mr. Casella, London; Messrs. Brake and Co., Stratford; Miss Davidson, Shirley; Mr. Mason, Sudbury; Mr. Birch, Wandsworth; Messrs. Ellis and Co., London; Mr. Winkworth, Shelford; Mr. Webb, Honiton; Messrs. White and Co.; Mr. Turner, Finchley; Dr. Spowart; Mr. Montgomery, Londonderry; Dr. Bower, Bedford; Mr. Mayfield, St. Helen's; Mr. Brewitt, Natal; Dr. Finch, Salisbury; Mr. Heard, Dublin; Messrs. Beal and Co., Brighton; Mr. Walker, Middlesboro'; Dr. Armstrong, Harperhey; Mr. Cressweller; Messrs. Sydenham, Bournemouth; Medicus, Birmingham; Glengar; Medicus, New Brompton; W. S., Durham; A. J. N., Liverpool; Surgeon, Maltchard Bishop; Beta, Liverpool; X. Y. Z., Southport; J. W.; Lady Superintendent, Newcastle-on-Tyne; H. B. G.; X., Carlisle; Treasurer, Royal College of Physicians; J. C. F., Aberdeen; B. O.; M.R.C.S., Edinburgh; T. J. B.; F.S.A., Wye; Medicus, Ipswich; Tibia; Medicus, Southport; Medicus, St. John's Wood; Venator, Nelson; Registrar, Bath; Medicus, Liskeard; V., London.

The Child's Pictorial, The Lady's Journal of Decoration, Liverpool Post, Manchester Guardian, &c., have been received.

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L DEPARTMENT

The Annual Oration

DELIVERED ON MAY 4 AT THE

MEDICAL SOCIETY OF LONDON

ON

OLD AGE AND THE CHANGES INCIDENTAL TO IT.

By G. M. HUMPHRY, M.D., F.R.S.,

PROFESSOR OF SURGERY AT THE UNIVERSITY OF CAMBRIDGE.

MR. PRESIDENT AND GENTLEMEN,—Old age acquires a gradually increasing interest as advancing civilisation enables a larger number of persons to attain to it, and affords them additional means of enjoying it and profiting by it. From the schoolboy day, now full fifty years ago, when the "De Senectute" of the great Roman orator made a lasting impression upon me, the subject of old age has had some fascination for me, though multifarious avocations have prevented my giving much attention to it. In the past year the Collective Investigation Committee of the British Medical Association, at my instance, commenced an inquiry respecting aged persons, and issued a form, with a memorandum, for the purpose of collecting information of various kinds respecting the condition, habits, &c., past and present, of persons who had attained to advanced age. The minimum age for the subjects of inquiry was fixed at eighty. We are indebted to many members of the profession, and to some others, for the returns they have taken the trouble to make, which at the present exceed 500, the number of males and of females being nearly equal. These have been, in part, carefully tabulated and analysed by myself, with the aid of my friend and assistant, Mr. A. Francis. It is not to be supposed that from this, or other investigations of the like kind, any very startling results will be obtained; for the hill of knowledge is mounted with slow and laborious steps, and we must be content to advance little by little. Moreover, I do not propose to weary you with many of the details of this inquiry, which, I may observe, is not yet completed, but to make a few remarks upon the subject of old age, which will be to some extent based upon information derived from the inquiry just mentioned.

We are, I think, too much accustomed in our ideas to limit the work of development to the periods of adolescence and maturity; and, indeed, the surpassing wonders of that work—I say surpassing wonders, for unquestionably the processes of development of an animal body are the most marvellous, the most mysterious, and the most interesting in the whole range of the physical world—are most fully demonstrated in the early periods of life. But they do not end in them, or even when the body has been brought to its fully matured condition. They continue in a definite and orderly manner, though with lessened and lessening activity, to the termination of life, at whatever period that termination may occur. The march of changing events in the human body, from the age of forty or fifty to one hundred, is as regular, as orderly, as developmental, though less quick, and therefore less apparent, as it is from birth to adolescence, or from conception to birth. It is one of the resultants of that inscrutable *vis*, call it what you will, and refer it to what you will, which makes all nature one, which determines the course and end of each animate and inanimate object, and by which, in the well-known words of Keble,

> "To its funeral pile this aged world is borne."

A main feature of the "ascending," if we may so call it, development, the development from birth to maturity, is an increase of material, an increase of activity, and an increase of strength—of passive or resisting, as well as of active, strength; and the main feature of the "descending" development, the development from maturity onwards, is a lessening of material, a lessening of activity, and a lessening of strength. In the normal "ascending" development, material and strength are added to the several parts of the body in due relation to their respective requirements, so that they may all grow on *pari passu*, and the proper harmony of proportion may be maintained between them; and in the normal "descending" development, the relative proportions of the several structures and organs are preserved, while weight, force, and activity are being lowered by gradual and well-adjusted diminution of material and of nutritive activity. During the time that the bones are becoming lighter and less capable of offering resistance, the muscles become, in like proportion, lighter and weaker, and with a narrowing range of action; and the associated volitional and other nerve-apparatus exhibits a corresponding lowering of energy and force. The loss of will to run, jump, and indulge in athletic sports is, or should be, commensurate with the inability of the muscles to effect the requisite movements, and of the bones to bear the requisite shocks. There should not even be a sigh for what is gone, or a longing for its return, though great, perhaps greater than ever, may be the pleasure in beholding the perfection of bodily form and in witnessing the manifestations of strength and activity in the supple frames of the young. The weakening of the heart and the diminished elasticity of the arteries provide a proportionately feebler blood-current; and a lower digestive power and a lessened appetite provide a smaller supply of fuel to feed, not enough to choke, the slowing fires. Thus the capacity for action is diminishing, and the demand for it and the material for it are diminishing also; and all are diminishing in due ratio to one another. It may be said, indeed, that at all periods of life the healthy and well working, and especially the enduring, quality of the body, depends upon a good adjustment, a good balance, of the several parts; and it is upon the well-ordered, proportionately or developmentally regulated, decline in the several organs that the stages which succeed to maturity are safely passed, and that crown of physical glory, a healthy old age, is attained.

A time comes at length when, in the course of the descending developmental processes, the several components of the machine, slowly and much, though equally, weakened, fail to answer to one another's call, which is also weakened, when the nervous, the circulatory, and the respiratory organs have not force enough to keep one another going; then the wheels stop rather than are stopped, and a developmental or physiological death terminates the developmental or physiological decay. The old man who had gone to bed apparently much as usual is found dead in the morning, as though life's engine had been unable to repair itself in sleep sufficiently to bear the withdrawal of the stimulus of wakefulness. Or some exertion may be followed by too great exhaustion. Dr. Willis, the attendant upon King George III., at the age of ninety, after a walk of four miles to see a friend, sat down in his chair and went to sleep, or was thought to be asleep, but he did not wake again. Or some slight, unusual, scarcely noticed excitement may have the same result. A cattle-dealer, aged ninety-eight, who attended Norwich Cattle Market on a Saturday in December of last year, soon after talking and laughing somewhat heartily with a few friends on the following Tuesday was found to be dead. Or a slight indisposition, further lowering the status and force of some organ, fatally disturbs the feebly maintained equilibrium. A lady, aged ninety-four, attended the early service at church, to which she walked a distance of a quarter of a mile to and fro, caught a slight cold, and died in the night.

How much may those who pass gently into this natural or physiological death be envied by the many sufferers under the protracted and painful pathological processes which too often induce a premature extinction of life! The most distressing part of medical duty is the being called upon to witness, with the inability to arrest, the onward course of disease, such, for instance, as that of a slowly but surely growing cancer, boring its way into the strong and sturdily resisting frame: and the great hope and aim of medical study is to prevent such fatal interferences with the developmental processes, and to enable these processes to work out, in their own uninterrupted way, the quiet, easy, gradual method of dissolution.

Yet, strange and paradoxical as it may seem, this gradual natural decay and death, with the physiological processes which bring them about, do not appear to present themselves in the ordinary economy of Nature, but to be dependent upon the sheltering influences of civilisation for the opportunity to manifest themselves and to continue their work. For the needs of the first, or infantile, period of helplessness Nature has made a sufficient provision in the parental instinct which protects and nurtures the young. But this lasts only so long as the requirement for it exists. It ceases as soon as the young has the ability to help itself; and it does not return and is not supplemented by anything of its kind. It gives way before that struggle for existence which is the engenderer of selfishness, dominating over all other impulses and shutting out all heed for the worn and weary, for the feeble and the decaying. These, being unable to help themselves, are crushed out by the various provisions which Nature makes for their destruction. The good result of this great seeming evil being that all in the natural, or, primitive, animal world is in the ascendant to, or in the enjoyment of, bodily perfection. All teems with budding life or full health and strength. To falter is to fall; forasmuch as the *first evidences of weakness and the beginning* of decay arrest themselves by preventing the power of self-maintenance in the weak and the decaying.

The same with disease. It, in like manner, stops itself. Indeed, it can scarcely be said to be allowed to enter into the pure realm of Nature. Sick animals are not there provided for, have no abiding-place there, and soon perish; so that there is no wasting and pining, no lingering fevers, no destroying cancers, no decrepit frames. Neither the bird that fails to elude the hawk nor the hawk that fails to seize the bird can long continue in existence. Each animal has its so-called enemy ready and at watch to deliver it from feebleness and disease; and the sudden destruction which *awaits them all, without fearful premonition and with little* pain—this killing in lieu of death—instead of being, as it is sometimes regarded, a cruel feature in Nature's plan, is a happy provision for deliverance from the slower death which increasing failure or progressing disease would have involved.

Thus, in the economy of Nature, death is swift, and comes early, as soon, at least, as failure of strength renders the animal unable to protect, or provide for, itself; and man, it would seem probable, had no exemption from this sharp, though, on the whole, beneficent law of animal life. In early times, when the race was to the physically strongest, when health, and strength, and activity were necessary to provide the *hand-to-mouth means of sustenance, and to give* defence, when men and animals were much on a par in this and many other respects, early death must have been the common fate, being brought about by climacteric agencies or by the tooth of the hungry beast, or by the hand of man himself. This, indeed, we still find to be the case among some of the rude races of mankind. But in man was the germ of a better order of things, the germ of sympathy with, of feeling and love for, others, which was besides and above the mere parental instinct, and which was calculated to counteract and over-ride the selfish bent, and to raise man in this, as in some other respects, above the mere animal. This has already done much, *and it has still an ample field for future development.* Through the growth of this germ it was given to man to introduce a new factor into the economy of Nature, and, by forethought, by mutual co-operation, and by care for others, which are the very essence, at any rate the very best feature, of civilisation, to prolong life, when by this very forethought and sympathy life had become more valuable, and when the prolongation of it had, consequently, become more desirable; and scope was thus afforded for the carrying out of those descending or senile developmental processes which must have been nearly dormant in the earlier periods of human existence.

It was not to be expected that this good seed should be without a blending with tares, and the scope thus given for the fuller development of the physiological processes gave scope also for the development of the pathological processes, and enabled the various diseases to spring up and take their course, afflicting not man only, but those animals also which come under his fostering or protecting influence. It may therefore be said that the prolongation of life into and through the periods of decay, and into and through the processes of disease—indeed, almost, if not quite, the very existence of decay and disease—is the result of human forethought and sympathy. In other words, decay and disease are, by civilisation, substituted for quick and early death. Without attempting to balance the *pros* and *cons* of this, we know it to be a position from which there is not, and ought not to be, any disposition to recede; and if there were the wish, there is not the possibility. The onward march of civilisation is a necessity, and the onward progress of disease will tend to go with it. But it does remain for forethought and sympathy to narrow the range of the evils they have themselves engendered, or which have sprung up with them; and it is pre-eminently the noble work of our profession to contribute to this—to weed out and check the growth of the morbid tares, and to help the good seed to grow on to its full harvest,—to prevent, that is, the origin, and to arrest the advance, of disease, and to give to the body the best opportunities for health and longevity. In this great physical work, let it be remembered, we shall not to any great extent succeed, unless our efforts are accompanied by equal efforts to carry out the higher and more important work of removing those impurities in the moral atmosphere for which civilisation has so much to answer, and with which the sources and spread of disease are closely—more *closely, perhaps, than we think—associated.*

The first requisite for longevity must clearly be an inherent or inborn quality of endurance, of steady persistent nutritive force, which includes reparative force and resistance to disturbing agencies, and a good proportion or balance between the several organs. Each organ must be sound in itself, and its strength must have a due relation to the strength of the other organs. If the heart and the digestive system be disproportionately strong, they will overload and oppress the other organs, one of which will soon give way; and as the strength of the human body, like that of a chain, is to be measured by its weakest link, one disproportionately feeble organ endangers or destroys the whole. *The second requisite is freedom from exposure to* the various casualties, indiscretions, and other causes of disease to which illness and early death are so much due. Now, in both these—notably, in the second—woman has the advantage over man, and she consequently attains to greater age. In the report of the Registrar-General for 1873, eighty-nine persons were returned as dying at or over the age of 100. Of these, ten only were males; and the superiority of female life is well known by insurance offices to exist, notwithstanding the higher rate of mortality that has been observed during the child-bearing period, and which, there is reason to think, is now slowly disappearing. That this superiority is not entirely due to the comparative *freedom from exposures* and to the greater temperance in the woman, but is partly a result of a stronger or more enduring inherent vitality, is shown by the fact that, even in the first year of life, when the conditions and exposures of male and female infants are the same, the mortality of girls is less than that of boys. A somewhat larger number of boys are born, but they are more difficult to rear; so that the females soon gain the numerical lead, and maintain it, with almost steadily increasing ratio, to the end. This superiority may be to some extent associated with the less wear and tear in the smaller machinery of the woman's frame as compared with that of man; and one might expect that the small persons in both sexes would live longer than those of greater stature. This, however, scarcely seems to be the case. We find from our returns that the average height of the woman above eighty is about 5 ft. 3 in., which, allowing an inch for the shortening incidental to age, makes it to fall little, if at all, short of the average middle-age stature. The men also we find to be 5 ft. 6 in., which, making a corresponding allowance, gives them a good average height. It may also be observed, which we should not have expected, that the rate both of the pulse and respiration is quicker in the longer-lived sex; the average pulse in the women over eighty being 78 to 79, while that in the men is 73; and the respiration in the women is 22, while that in the men is 18 to 19.

It is a point of interest, in connexion with the inborn or hereditary quality, that phthisis is reported to have appeared in some of the immediate relatives—father, mother, brothers, or sisters—of 82 of the 500 aged persons; in 51 of the relations of the 250 females, and in 31 of those of the 250 males. In the reports of some of these, it is stated to have occurred in several members of the family; and, in a few instances, the disease was manifested in both father and mother. It is evident, therefore, that the delicacy, or peculiarity, whatever it be, of constitution, which is associated with the tendency to the development of tubercle, is not only not *incompatible* with longevity, but is not unfrequently associated with it. No other special peculiarities have been shown in sufficient numbers to deserve notice here. The greater proportion are reported to be of long-lived families, to have enjoyed good health throughout their lives, to have had good appetite and good digestion, requiring little or no medicine, to have been moderate or small eaters, to have taken little alcohol, and, commonly, not much meat; they have been good sleepers; and they show no traces of gouty or rheumatic affection in the joints of the hands.

I have said that the main features in the downward, or senile, developmental process are a diminution of material and a diminution of force; and I apprehend that in the normal state it should be simply this—such a diminution, with, perhaps, a slight addition to the amount of oily matter naturally existing in the tissues; and that the other changes and degenerations that are incidental to age are no part of, but are rather to be regarded as deviations from, or morbid departures from, the natural phenomena. Let us consider the changes which take place in the skeleton, forasmuch as they are most appreciable, and, in many respects, the most interesting. The bones which, up to maturity, had been gaining in weight and size, now gradually lose weight, but do not ordinarily diminish in size, as they do in atrophy, from paralysis; indeed, they not unfrequently rather increase in size from the continuance of a slow process of subperiosteal ossification. To this, in part, may be attributed the sharp outlines which the figure of old persons commonly acquires, except in the case of those who become corpulent. The absorption takes place first and chiefly in the more vascular and cancellous parts, the bony plates becoming thinned and removed, and the cancelli and the canals being enlarged and filled with marrow, while the bony tissue itself becomes often, though not always, more impregnated with oily matter. Hence, although the walls of the shaft are being gradually thinned from within, the ends of the bones are first and most affected, which explains the greater liability to fractures near the joints in old persons than in the middle-aged. This change, with the proportionate liability to fracture, is especially remarkable in the trochanteric and cervical parts of the thigh-bones, the strength of which is so much dependent upon the strength and disposition of the cancellous plates.

This change takes place earlier in women than in men, which may be a consequence of the earlier cessation of active occupation in them, and the less amount of out-door exercise they usually take, or it may be due to some natural predisposition in them, associated with a greater tendency to adipose degeneration in other parts, and evincing itself occasionally in an exaggerated manner in the production of osteomalacia. The greater frequency of fracture of the neck of the thigh-bone in them is to be attributed to the greater weakening which the part thus undergoes, as well as to the more near approach to a right angle which the neck naturally forms with the shaft in women than in men.

The vascular and cancellous character of the alveolary processes of the maxillary bones renders these parts peculiarly liable to undergo wasting or absorption, causing the loosening and falling out of the teeth. This takes place earlier in women than in men; the average number of teeth, according to our returns, in men above eighty being 6 and in women 3. Of 221 males, 57 are reported to be edentulous, and of 234 females, 113 are said to be in that condition. The process of absorption and loosening of the teeth also bears a relation to the sponginess of the alveolary processes, being greatest in the upper jaw, in which the teeth in 455 of our octogenarians, in whom an account of the teeth is given, are 736, those in the lower jaw amounting to 975. For the same reason they are greater in the molar and premolar regions than in the incisor and canine, the numbers of teeth remaining being 559 molars and premolars, 409 canine, and 743 incisors.

This absorption of the alveolary processes and consequent removal of a part of the bodily machine which is in full and daily use is remarkable, though it has something of a parallel in the removal of another cuticular appendage—namely, the hair of the head. For the reasons I have given it can scarcely take place in the condition of struggle for existence of the natural animal world, or in man in his primitive state; and it is accordingly commonly observed that the unearthed skulls of our early ancestors are well provided with teeth. The loss of teeth would imply a decay which the early man could scarcely have survived. What effect in more modern life this loss has upon the general health and the duration of the body is not easy to determine. It is often survived for many years; and it may be noted that, as before stated, it takes place more in women than in men, though they are the longer lived. Civilisation is doing something to supply the deficiency which it thus brings in its train by providing artificial substitutes; and they are at any rate free from some of the disadvantages, such as disease and decay, associated with the natural organs.

It is remarkable how completely the alveolary processes become cleared away, so that scarcely a trace of them remains above or below; and the whole framework of the face, which ministered with them to mastication, is attenuated, and the body of the lower jaw is reduced to the narrow bar of its hard lower margin. At the same time, the resistance of the teeth being removed, the direction of the pull of the muscles upon the jaw is altered so as to open out the angle of the bone and bring the ramus and the body almost into a horizontal line. Thus the form of the lower jaw returns nearly to that of the infant. But there is this great difference, that whereas in the infant the bone consists mainly of the tooth-bearing or alveolary part, and the sub-alveolary portion scarcely exists, in the senile condition the latter only remains, the former having been cleared away.

A similar alteration of form in a bone, from an alteration in the direction of muscular force, or from pressure by other cause, may, as we know, be produced in any part of the skeleton, and at any time of life; and a very analogous change to this in the lower jaw may be observed to take place in the neck of a thigh-bone after amputation in the thigh; for the nearly horizontal pull of the muscles upon the trochanter, not being resisted by the vertical weight of the body upon the head and shaft of the bone, will have the effect of widening or opening out the angle. Some years ago I placed in the Pathological Museum at Cambridge two specimens illustrating this; and the fact is not without its interest in connexion with the often-debated question whether the converse of this change takes place in old age—that is, whether the angle between the neck and the shaft of the thigh-bone becomes lessened. A change of the kind certainly takes place in the ascending period of life, the angle being widest in infancy and lessening during growth; and this change is more marked in females than in males, the difference in the angle of the thigh-bone between the two sexes taking place, in all probability, about the time of puberty, when the pelvis is widening in the female and the hips are becoming more prominent. But does this alteration continue in the descending period? I have taken some pains to ascertain this, and have made several measurements of the angle at the junction of the neck with the shaft of the thigh-bone in old people; and though I have in some instances found it less than in the adult, in the greater number of cases it was not so. I have not had the opportunity of making sufficient measurements to settle the question, but, so far as my observation goes, the change is the exception rather than the rule; and I am not aware that a change of the kind takes place in any other bone as a mere consequence of senility—without, that is to say, there being some alteration in the direction of the pressure or forces exerted upon the bone. In the bent back of old age the vertebræ become modified in form; but this is a consequence of the stoop, from enfeebled action of the dorsal muscles, throwing the weight of the trunk too much upon the fore part of the spinal column.

The changes which take place in the skull during old age are interesting. Commonly they correspond with those in the facial part, and the whole cranium becomes lighter and thinner, and therefore smaller. In some cases, however, it acquires an increase of thickness, by deposit of bone on the interior of the brain-case, and chiefly of the calvarial part, which seems to depend upon the lessened pressure there, and the consequent greater afflux of blood caused by the shrinking of the brain. The increase is usually most marked in the frontal region, which accords with the fact that the shrinking is most pronounced in the frontal lobes of the brain. In not a few instances I have found, as mentioned in my treatise on the skeleton, that there has also been an increase in the density and weight of the brain-case to such an extent that, in spite of the loss of the teeth and of the alveolary processes of the jaws, and the atrophy of the face, the weight of the entire skull exceeded that of the average adult skull. In a woman reputed to be 103, whom I examined, the contrast between the thick, dense, heavy skull, and the extremely attenuated light thigh-bone, both of which are in the Cambridge Museum of Anatomy, is very striking. In connexion with this change and the cause to which it is referred, it may be observed that other parts of the osseous system, particularly the harder parts, are liable to undergo similar changes, leading to enlarged and sclerotic conditions, when at any period of life and from any cause they are subject to an increase of blood-supply.

The cartilaginous parts of the skeleton become somewhat thinner, which accounts for the loss of height in the aged; but I do not think that they usually undergo any other perceptible change in ordinary healthy old age. I have invariably found the costal cartilages soft in old people in whom I have had an opportunity of making an examination after death; the body of Old Parr, as described by Harvey, therefore presenting in this respect, as I believe, no exception to the general rule. And I regard the calcification of them to be a morbid rather than a senile change—a degenerative change to which the body is liable, as it is to cataract, bronchitis, and some other conditions, when it has passed maturity; and not one of the natural senile developmental processes. At whatever period of life it occurs—and it is not unfrequent about sixty—it omens ill for the further prolonged wear of the fabric. It is not quite easy to put the condition of these cartilages to the test, especially in elderly persons. It may, perhaps, be best done by estimating the elasticity perceived when gentle pressure is made upon the lower part of the sternum, though there are obvious difficulties and objections to this method; and of 274 returns in our inquiry upon this point, it is as much as can be expected that the elasticity should be stated to be distinct in 126; in the remaining 148 it is said to be indistinct.

It may, I think, in like manner, be said, with regard to the calcification of the arteries, that it is the result of a morbid process intruding itself upon, interfering with, and arresting, the normal progress of senile development. That it is not, at any rate to a perceptible amount, a usual accompaniment of old age is shown by the fact that in 362 returns respecting the condition of the arteries in persons over eighty these vessels are stated to be knotty in only 40, and even in 257; they are noted as being tortuous in 71. Moreover, the pulse is reported as compressible in 311, and incompressible in 72, in the returns relating to it. In the majority of cases, therefore, the arterial system appears to present a healthy condition in those who attain to great age.

The rate of the heart's beats, according to our returns, does not vary much as age advances. From eighty to ninety, it averages 73 to 74 in men, and 78 to 79 in women. It is stated to be regular in 322, and irregular or intermitting in 85.

The respiration in 110 returns of men between eighty and eighty-five averages 17 per minute. In 47 returns of men between eighty-five and ninety it averages 19 to 20; and in 16 returns of men at and over ninety it averages 23; in women it is a little quicker. Thus, in 86 returns of women between eighty and eighty-five it averages 22; in 54 between eighty-five and ninety it is also 22; and in 37 at and over ninety it is 23. It has to be borne in mind, however, that the not unfrequent occurrence of bronchitis in the aged raises somewhat the average rate of respiration in them.

The failure of nutritive force in the brain manifests itself in the lessening of that power of concentration and quickness of attention upon which the sharp stamping of impressions and the ready recall of them depend; hence the memory for recent events is commonly impaired. The old man meanders on in his conversation unconscious that he is repeating himself; he remembers the tales of long past times, but forgets that he has just told them. This may go on to the condition of senile dementia. Happily, it does not often do so; and it is satisfactory to note how many of the very aged are in good possession of their mental faculties, taking a keen interest in passing events, forming a clear judgment upon them, and full of thought for the present and future welfare of others. It is no less satisfactory to find that the active, even severe and long-continued, functional activity of the matured brain seems in no way to impair its enduring qualities, and that good earnest useful employment of body and mind are not only compatible with, but even conducive to, longevity. A good example of this preservation of mental and bodily faculty to extreme old age was presented by Titian, who is related to have been engaged in painting a picture, which has its place in the gallery at Venice, when in his ninety-ninth year he was cut off by the plague. The wasting of the cerebral hemispheres, which is the accompaniment of failure and feebleness of the intellectual powers, diminishes the pressure in the cranial cavity, and so causes an increase of fluid in the subarachnoid lymph-spaces between the convolutions, and sometimes, as I have already mentioned, an increase in the thickness of the skull. A similar effusion into the connective tissue of other parts of the body, especially the lower limbs, probably also from deficiency of pressure upon the vessels, or lowered tension of the several tissues, is liable to take place, constituting a "senile œdema." This is no uncommon thing in the aged, and is sometimes induced by temporary causes, so that recoveries from it are not unfrequent.

Of the 157 males from eighty to eighty-five, only 6 are stated to have, or to have had, disease of the prostate or bladder; and of these, 3 had recovered from it, 1 at the age of seventy-nine, although the trouble had been of six years' duration. In one, the difficulty of micturition had existed for thirty years. Thus far, the evidence was favourable, and gave rise to a hope that, when a certain period of life had been attained, this serious and painful malady would be escaped. I find, however, that of the 72 males between eighty-five and ninety 17 are reported to be more or less sufferers from urinary troubles. In 4 of these, micturition is stated simply to be slow. In others, there is more or less irritability, or incontinence, or retention. One gentleman of eighty-eight has been entirely dependent upon the catheter for forty years. In 1 only of the 30 returns of men above ninety is there any mention of affection of this kind. On the whole, therefore, although the prospect of escape from diseases of the bladder and prostate gland is not quite as good as I had anticipated from the returns of the men between eighty and eighty-five, it is evident that the aged are, to a considerable extent, free from this source of trouble. Indeed, the aged body does not seem to be, on the whole, prone to disease. Few of the returns indicate the presence of any special malady. We know that even cancers, when they attack old persons, often make slow progress in them, and sometimes fail to make way at all, remaining stationary, or even withering; and the susceptibility to contagious diseases appears to decrease from infancy to old age. The nutritive processes seem to be most easily led astray in early life, when they are in greatest activity, when there is most receptivity and excitability, and most quick communication of impressions from part to part, and from organ to organ.

In the *British Medical Journal* of the 12th of July last I offered some remarks on the repair of wounds and fractures in aged persons. I had frequently noticed that it, as well as the healing of ulcers, takes place as quickly as in middle life—indeed, sometimes more quickly; and I gave the results of a collective investigation on a small scale, which were confirmatory of that view. Since then many instances have been communicated to me by medical men which lead to the same conclusion. I there remarked that "the statement must be qualified in a manner which savours rather of the paradoxical—namely, that wounds in old people heal quickly, provided they do not slough. That is to say, the apparently opposite tendencies exist at this time of life—namely, the tendency to slough and the tendency to heal quickly. Such, for instance, is the experience of oculists, whose testimony on the subject I have asked. They find that the cornea sometimes sloughs after the operation for cataract in old people; but that, when it does not slough, the wound heals quite as quickly as, or more quickly than, at an earlier time of life. So in other operations. The old person may sink, or the wound may slough or ulcerate; but, if these eventualities be escaped, a quick healing may be expected. Certainly this would not have been anticipated. We should not have thought, when the nutritive forces are generally failing, when strength and weight are diminishing, when repair is each year less and less able to keep pace with wear, as evinced, among other things, by the fact that exhaustion is more quickly induced and less quickly recovered from; when the brain is shrinking and memory and other mental powers are lowering, and when the circulation is becoming weaker—that, under these circumstances, the nutritive or reparative processes concerned in breach-closing—in the healing of wounds and ulcers—should manifest an increase of energy, at any rate of rapidity, in carrying on their work. I do not know well how to explain it; but this exceptional phenomenon of nutrition is not peculiar to old age. It may be observed in some other lowered conditions. The wounds in patients exhausted by large losses of blood usually heal quickly, as they also do after operations for cancer, and in many other debilitated conditions. I do not mean in persons of naturally strumous temperament, but persons who have been weakened by illness or in other ways. So do, commonly, the gaps caused by carbuncles and bedsores; and very remarkable is the quick healing of the stump left by senile gangrene; that is to say, this evidence of vital energy is manifested in the part next above that which was unable to keep alive at all. An exception must be made of certain impaired conditions of the nervous system in which wounds and sores are sometimes very troublesome."

The fact that the fracture of the neck of the thigh-bone, which may be regarded as the old person's fracture, rarely unites, will be urged in support of the opposite and more generally accepted view on this point. "It is well known, however," to quote again from the same paper, "that this failure depends, not upon the age of the patient, or on any peculiarity in the structure of the bone, or upon any changes that take place in it during the later periods of life, though those changes are such as to cause rarefaction of its cancelli and greater liability to fracture, but upon other causes. Such causes, more particularly, are the separation of the broken surfaces, which commonly occurs; the buried position of the inner fragment in the cavity of the acetabulum, which prevents any overlapping of the fragments and any throwing out of uniting matter all around it; as well as the comparative absence, and, when the fibrous covering of the neck is torn though all round, the complete absence, of tissue in which that material can be produced, and also the bathing of the fractured surfaces by the synovial fluid. That these conditions, which are found to be more or less prejudicial to bony union of fractures into other joints, and not senility, are the real causes of failure in the case of the neck of the thigh-bone, is proved by the fact that union of bone will take place at this part of the skeleton as well as elsewhere, if the fractured surfaces be fixed in apposition, either by any kind of impaction or by well-adjusted appliances;" and that this will occur in the aged, there is ample evidence in our museums.

The same remark does not, I fear, apply to the repair after exhaustion from fatigue. The old person is soon tired, and does not recover quickly. The restorative processes of sleep are not so brisk in him as in the young. I have often, however, been surprised at the quick recovery of health and strength by old persons who have been depressed by indisposition and illness; and I have attributed this rallying power to the general soundness of the system, and the good working balance of the several organs which has brought them to old age. To what extent it is, as a general rule, shared by the aged and may be relied upon in them, I must leave to wider experience to decide.

After all, length of life is to be really estimated not by numbers of years so much as by good work done, not by the amount of time spent in the tame fruitless manner indicated by the pithy words of Cowper—

> "For fourscore years this life Cleora led:
> At morn she rose, at night she went to bed"—

nor by endeavours solely to advance our own fortunes, or reputation, or comfort, but by persevering efforts to promote the welfare of our fellow-men.

Thus considered, how large have been the lives which many of you have spent in long laborious days and watchful nights, with little present gain or prospect of future requital, in the out-patient and post-mortem rooms of our hospitals, by the midnight lamp, or by the bedsides of the sick in this vast metropolis, where civilisation has worked out its best and its worst results. While wishing you yet many years of the like usefulness and its assured reward, I must express the feeling that it is not right or just that, in this the wealthiest city the world has ever seen, and in this very wealthy land, so much of the time and energies—the best time and energies—of many of the younger members of our profession should be devoted to attendance upon out-patients, and so much time of a far larger number of the profession should be employed in the onerous and anxious duties of the Poor-law service with such very inadequate pecuniary remuneration. For the sake of all concerned reform is needed here.

I will only further add that there are many points in relation to longevity which I have alluded to only briefly or not at all; that it will be evident from the few figures I have given we need more information; that the forms and memoranda issued by the Collective Investigation Committee can be obtained from the Secretary to the Committee at the office of the British Medical Association, 161A, Strand; and we shall be obliged if any of those present or other members of the profession will contribute to our store, especially by making returns of persons who have attained or exceeded the age of ninety years.

ON THE

SIGNIFICANCE OF A PECULIAR MURMUR IN RELATION TO THE DIAGNOSIS OF INTRA-THORACIC DISEASES.[1]

BY J. S. BRISTOWE, M.D. LOND.

THE various cardiac, arterial, and venous murmurs are for the most part well understood at the present time, although from various causes difficulties still, and probably ever will, arise to interfere with their correct appreciation in particular cases. Cardiac murmurs, at any rate such as are due to the valvular orifices, occur during either the cardiac systole or the cardiac diastole, never occupying the whole duration of either of these actions, and are never prolonged continuously from one of these actions into the other. The nearest approach to anything of the kind is when the first sound of the heart is preceded by a presystolic mitral and followed by a systolic mitral, an exception which, however, is apparent rather than real. Venous murmurs are continuous, and this continuousness characterises them even when they swell and sink more or less rhythmically. Arterial murmurs are of two kinds:—First, murmurs conducted by the blood stream from the aortic orifice, which, therefore, are simply basic systolic, or diastolic, murmurs slightly delayed in proportion to the distance from the heart at which they are heard; and, second, murmurs which are developed in the arteries themselves, in consequence of narrowing or dilatation of their channels, of roughness of their walls, or of some other abnormal condition. The former kind of arterial murmurs needs no consideration at the present moment; it is the latter which interests me. These murmurs are for the most part systolic—that is, they are developed during the diastole of the arteries and while the blood is flowing with its greatest rapidity along them. They are said to be also occasionally diastolic—in other words, to attend the arterial systole, at which time the blood-stream is comparatively sluggish. And hence it is often taught, I believe, that murmurs of arterial origin may be either systolic or diastolic, and may consequently, like true cardiac murmurs, be double. I doubt the truth of this teaching, and my doubts are not removed even by the able paper on this very subject recently published in the *British Medical Journal* by Dr. Finlayson. There is no alternate backward and forward flow of blood in the arteries, and consequently alternate direct, and regurgitant, murmurs cannot arise in them. In the early part of the aorta the blood remains almost stagnant during the cardiac diastole, and it seems practically impossible that its movement can at this time and in this place be productive of sound. As we pass, however, further and further from the heart, the flow of blood during the cardiac diastole becomes more and more active, until at length it gets nearly, if not quite, uniform, during the whole of the cardiac cycle of events. Now, here it seems to me quite obvious that a murmur might run through both the cardiac systole and the cardiac diastole, and that anyone taking the cardiac beat or the pulse for his guide might assume the presence of a double murmur. My belief is that such murmurs are single, that they commence at the moment the effects of the cardiac systole are felt, that they are continued through the whole of the cardiac systole while the blood is flowing rapidly, and that they are continued without break into the period of the cardiac diastole, generally with some modification of character, and die away before the occurrence of the next pulse. In other words, my belief is that arterial murmurs developed at some distance from the heart are due to the onward flow of blood, that they occur during that period in which the blood is flowing with sufficient force to produce a murmur, that they are hence apt to be prolonged beyond the period of the cardiac systole, and that it is a needless refinement, if not an error, to regard them as double in the same sense as an associated aortic systolic and diastolic murmur is double. I have on several occasions, in connexion with abdominal aneurysms, observed murmurs of the kind here referred to, which some have regarded as double, but I have held to be single, and which I have elsewhere briefly described. Murmurs closely resembling these, if not actually indistinguishable from them, may often be heard in cases of aneurysmal varix or communication between an artery and vein. But here the murmur is said generally to be continuous, and in this respect to resemble a venous hum, associated, however, with rhythmical exacerbations, due to the cardiac systole. Such murmurs may also be heard in cases of communication between the aorta and pulmonary artery, or one of the auricles. These remarks are intended to be introductory to the description and discussion of two or three cases which have many points of independent interest, but in which the presence of the kind of murmur just discussed was both a subject of dispute and an important item in forming a diagnosis.

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[1] Read before the East London and South Essex District of the Metropolitan Counties Branch of the British Medical Association, March 19th, 1885.

CASE 1. *Pulsating cancerous tumour of right scapula, both iliac bones, and second dorsal vertebra; paraplegia; bedsores; death; autopsy.* — Catherine B——, thirty-seven years of age, was admitted under my care on July 12th, 1878. She had been married five years, but there was nothing in her history to throw light on the origin of her disease. It was after the birth of an eight months' child in the previous January that the symptoms of her present illness first showed themselves. When she got up after her confinement she felt a good deal of pain in the back between the shoulder-blades, and much pain also in the epigastrium; and these have continued ever since. She has not had much cough, but she says that of late she has spat a good deal of blood, sometimes as much as a pint in the week. She has lost flesh and strength.

The patient is a woman of healthy complexion, and looks well nourished. She complains of pains, between the shoulders running up into the neck, in the chest, in the right shoulder, and in the hips, knees, and ankles. It hurts her to move, and she generally lies on her back. The right side of the neck is somewhat puffy, the veins are large, and there is some pulsation, apparently due to the veins. Also there are a few slightly enlarged glands high up in the neck. The lung resonance and respiratory sounds are fairly normal in front. There are murmurs in connexion with the heart and large vessels which present some peculiar features. In the first place, there seems to be a systolic murmur at the apex, due to the mitral orifice; in the next place, at the base of the heart there seems to be a double murmur, which may be frictional; and, in the third place, there is a loud prolonged systolic murmur audible in the aortic area, and extending thence to the outer extremity of the right clavicle, where it seems to be especially loud; it is also distinctly audible on the right side of the neck. The heart's area of dulness is somewhat increased, and its apex is a little displaced outwards. Its action is regular, and it is thought that the pulses in the carotid and radial arteries of the right side are a little larger than the corresponding pulses on the left side. Abdomen healthy. Tongue clean; appetite poor; bowels regular; urine of high specific gravity, and containing a trace of albumen; temperature normal.

It was assumed at first that the patient had either some obscure cardiac disease or an aneurysm, and all the symptoms were attributed to this cause. But she had not drawn attention to some important features in her case, and our own examination had been incomplete and misleading. A few days after admission, a more exhaustive inquiry was made, and on stripping the chest it was found that a somewhat elastic pulsating tumour occupied the whole of the infra-spinous fossa of the right scapula. This was fairly smooth and rounded, projected about an inch beyond the level of the left scapula, yielded a sensation as of dilated vessels, and did not crackle on hard pressure as if containing plates or spicula of bone. Further examination revealed two similar pulsating tumours, one on either buttock, growing apparently from the subjacent iliac bones. The right, which was the larger of the two, appeared to be of the size and shape of a penny bun. They were round in outline, projected half an inch or so above the general level, and felt as though formed by plexuses of dilated vessels; and large, apparently varicose, veins were visible about their margins and extended from one to the other. All the tumours presented a well-marked murmur. Some of those who examined them regarded the murmur in each as double: as comprising an element corresponding to the cardiac systole, and an element corresponding to the cardiac diastole. My own view was, and repeated further examinations confirmed me in the correctness of it, that the murmur was single, but much prolonged; that it commenced with the arterial pulse or cardiac systole, continued throughout the whole of the cardiac systole, and was prolonged with some change of character into the period of the cardiac diastole. I also came to the conclusion that the sounds heard in the front of the chest were due mainly, if not entirely, to the scapular tumour, and that the supposed double murmur at the base and between the base and the clavicle was a single murmur prolonged through the systole into the diastole. This murmur, as before stated, was loudest at the outer angle of the clavicle, where its continuity was unmistakable, and diminished in intensity as the aortic area was approached, where it most presented the semblance of being an ordinary double murmur. At the apex a systolic murmur only could be heard. It was difficult to be sure whether this was simply the before-described murmur, of which the loudest portion only was transmitted, or an independent mitral murmur. There was much diffused pulsation over the whole of the cardiac area; and on deep expiration pulsation and a thrill were perceptible in the inner part of the left second intercostal space. It was further discovered that there was undue prominence of the upper three dorsal vertebræ, and much tenderness in the neighbourhood of the second and third. It may be added that she suffered from dyspnœa; and that examination of the larynx and retinæ showed these parts to be quite healthy.

The patient gradually got worse. She grew weaker and thinner, suffered constantly from severe pain referable to the regions before indicated, had considerable dyspnœa, and her tumours slowly increased in size. Latterly her pains were referred chiefly to the epigastrium, buttocks, and lower extremities; and early in November she began to show signs of paraplegia, which about the middle of the month became complete. At this time she had lost feeling and voluntary motion in the legs and control over the rectum and bladder, and a large bedsore had formed over the sacrum. Subsequently great œdema of the lower extremities supervened, a purpuric eruption appeared on the arms, and an abscess formed in one of the thighs. She became extremely emaciated and feeble, and (though continuing quite sensible) very apathetic, and died worn out on the 23rd of January, 1879, as nearly as possible six months after admission into hospital and twelve months from the beginning of her illness.

Necropsy.—The upper half of the body was much emaciated, whilst the lower part of the trunk and the legs were enormously swollen with œdema. The buttocks especially were enlarged, partly from œdema, partly from the presence of tumours. Over the sacrum was a very large bedsore, extending down to and exposing the bone. The arms and hands were studded with purpuric spots, many of which presented central vesicles. The pleural cavities were healthy, the lungs congested and œdematous. The pericardium contained an ounce or two of serum, and over the anterior surface of the right ventricle was a large milk patch, and at the apex of the heart some old thickening. The heart was generally hypertrophied and dilated, but all its valves were healthy and apparently competent. The peritoneal cavity was normal. The capsule of the liver was somewhat thickened, and the centres of the lobules were congested. Spleen small, healthy. Stomach and bowels free from disease. The urinary bladder was dilated and injected. The right ureter and kidney were healthy, but the left ureter and the cavity of the left kidney were congested and dilated. This kidney was somewhat swollen and congested, and white patches studded its cortex, and white radial streaks its medulla. Suprarenals normal. A few very small fibrous tumours were present in the uterine walls. The pelvis was removed in mass in order to be minutely examined and to form a museum specimen, but unfortunately it was allowed to spoil, and no exact record of its condition was made. The posterior part of each iliac bone was connected with a large carcinomatous mass, which had grown backwards, caused stretching and attenuation of the glutei muscles, and closely approached the cutaneous surface. Large veins meandered over the tumours and through the substance of the muscles. The hip-joints were unaffected. The tumour of the right scapula had originated in the portion of the bone below the spine, and had destroyed its whole substance with the exception of a narrow strip along the vertebral edge. Many dilated veins were seen upon the surface of the tumour, and many vessels entered its substance. Shoulder-joint healthy. The second dorsal vertebra was softened and wholly destroyed by a growth which had originated in it and grown backwards, pushing the periosteum, ligaments, and membranes of the cord before it, and thus causing compression and softening of the cord at that spot. The cord and membranes were not, however, directly involved in the growth. The brain was healthy.

Clearly there was nothing discovered in the condition of the heart or pericardium to explain the murmurs heard over the front of the chest. And I think, therefore, I am justified in concluding that the view I took of the auscultatory phenomena during life was the true one—namely, that the murmurs were due to the vessels of the tumours, and, for reasons already stated, to the arteries rather than to the veins. I was inclined at the time to attribute the loudness of the murmur at the acromion process and about the clavicle and sternum to its conduction from its seat of development in the scapula along the continuous chain of bones. I think this explanation is adequate.

(*To be continued.*)

ON THE

NON-MALIGNANT TUMOURS OF THE SPERMATIC CORD, AND THEIR DIAGNOSIS FROM HERNIA.

BY EBEN. WATSON, M.A., M.D.,

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(*Concluded from p. 788.*)

So much, then, for the fluid tumours of the spermatic cord. I now come to the much more difficult subject of the solid tumours of this organ. My difficulty here arises, not so much from the want of cases in point as from the want of cases with definite and demonstrable results. The indubitable facts of ordinary anatomy, however, help us in our understanding of these cases; for it reveals to us that tmixed with the common areolar tissue of the pelvis and of he cord are numerous *small masses of fat*. These are more abundant within the pelvis, but are also sometimes found in the cord itself. Now this is true for subjects of all ages and free from morbid affection of these parts; but it is well known that at and about the middle period of life fat naturally increases in the body, and especially in the abdomen. Nothing, then, is more likely than that these nodules of fat should at that time increase so as to deserve the name of tumours. Hence we are well prepared to receive the statement of pathologists that non-malignant tumours of the cord are either fatty or fibrous (areolar), or a mixture of both, and my experience, so far as it goes, confirms this statement; but I have not more than one actual dissection[1] to contribute to those already on record, for most of my cases are still alive, and therefore perhaps still doubtful. A good example is the following:—

A middle-aged man from the country called at Mr. Hilliard's shop to get a truss for what he thought was an inguinal hernia; but Mr. Hilliard, on examining it, differed from him, and at least thought it was so unusual in its characters as to induce him to advise the patient to see a surgeon when in Glasgow. He therefore consulted me, when I found a small soft inelastic tumour passing from the right inguinal opening. It could not be separated from the cord when the patient was standing up. It gave a distinct but slight impulse on coughing, and entirely disappeared in the recumbent position. It was noticed, however—and this I think important,—that whenever the patient stood up the tumour was there in its old place, as if it simply hung forward again owing to the patient's change of position. When the patient coughed while in the recumbent position the impulse given to the tumour could be both felt and seen, but whenever the cough ceased, or in the intervals between his coughs, the tumour disappeared. This would not likely be the case with a recent oblique inguinal hernia, which, when coughed down, generally remains down until put back by the hand. Of course the tumour in this case had no gurgling as if it contained bowel, but felt smooth and soft, and slipped readily from the fingers to either side of the inguinal opening, into which it could be easily pressed in any position of the body. It had existed probably for a long time, and the man could not tell how his attention had been drawn to it, but when he discovered it he at once consulted his doctor in the country, who advised him to wear a truss, but it had not kept it up rightly, and hence his visit to Mr. Hilliard. I did not think this a hernia, even of omentum, but a small portion of fat—a lipoma, in short, connected with the upper part of the cord, or possibly an instance of what Cloquet actually found on dissection, and described in his work on Hernia—viz., a portion of fat belonging naturally to the areolar tissue of the pelvis, which had increased unduly and protruded through the inguinal canal. This would no doubt better account for the impulse on coughing and the disappearance of the tumour in the recumbent position. I therefore did not press the continuance of the truss; but as it relieved the man's mind to wear it, I advised that it should be of the slightest power of spring. It is nearly two years since I saw this man, but I have heard from Mr. Hilliard that he lately saw him, much improved in health, but with the little tumour quite unchanged in size or appearance.

I could relate, if *necessary*, the details of other two cases, which I still occasionally see, of precisely similar kind, only they have to my knowledge continued much longer without appreciable change. In one of these cases a slight truss has long been worn, in the other no artificial support has been employed, and both patients are very active in their habits, and enjoy quite good health. It may be worth mentioning that in the latter of these cases a truss was at first applied by the advice of another surgeon, but it was found that the little tumour constantly slipped to one side of the pad, and caused a disagreeable sensation of pinching to the patient. He therefore gave up using it, and without any increase of the tumour, though it is nearly ten years since he first accidentally noticed its presence.

I believe that these are cases regarding which there may be much difference of opinion, especially when stated in writing without examination of the patients, or unless those who read them have had experience of some such cases for themselves. I can only say that these tumours differ from omental herniæ, with which they are alone comparable, in that they are absolutely painless and quite destitute of that dragging feeling characteristic of true epiploceles. They are quite smooth, of a regular oval shape, almost fluctuant, and slide about more widely than herniæ. These characters of tumours of the cord may be so far definitely given and appreciated without further explanation. It is not so, however, with the other two, which are perhaps the most important of all—viz., the impulse on coughing and the disappearance in the recumbent position. Let us, therefore, consider these a little more particularly.

1. When the tumour is situated high up the cord, and indeed belongs partly to the abdomen, the impulse on coughing may be as distinct as that of an omental hernia; because in such an act pressure is made equally on all the contents of the abdomen, and must tell on the tumour as it would on an omental protrusion; but as the tumour grows and descends towards the scrotum, which it naturally does by its own weight, this impulse on coughing greatly diminishes, and so it happens that in most cases, before a surgeon is consulted at all, that sign is absent, or at all events quite distinguishable from the direct and forcible impulse given to a hernial protrusion, for it is then easily perceived that the tumour only partakes of the general succussion given to the whole side of the abdomen.

2. In like manner, when the patient lies down, the tumour, if small and soft and partly contained in the abdomen, may entirely disappear into the loose areolar tissue above the internal inguinal opening; but when it grows larger it cannot wholly disappear, and must remain partially in the canal, where it may be felt rolling under the surgeon's finger, and whence it falls out apparently by its own weight, more quickly than a hernia, whenever the patient stands upright. In this, perhaps, it is assisted by the elastic reaction of the posterior wall of the inguinal canal, and the tension of the conjoined tendon produced by the action of the abdominal muscles; for it is only by weakness, or at least, relaxation of that tendon, that the tumour is permitted to conceal itself in the canal. It must be remembered, too, that the spermatic cord slips up or is pulled up by the cremasteric muscle much higher in some subjects than in others;

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[1] When operating in a case of strangulated hernia, on May 2nd, 1885, I found a small fatty tumour, about the size and thickness of one's thumb, connected with the outside of the hernial sac. I excised it before introducing a suture into the inguinal opening.

and of course any tumour of its substance, if soft and yielding like lipoma, would go along with it, and this has suggested to me to try if traction on the cord would make the tumour descend. I think this manœuvre, if done very gently, does somewhat change the position of these tumours, and I am quite certain that it greatly diminishes the impulse given to them on coughing. Of course this arises from the traction freeing the tumour from contact with the posterior wall of the canal, and would afford good corroborative evidence of its real nature in a doubtful case. In some of these cases, however, the tumour grows both a great deal harder and larger in time, and loses many of the above characters, becoming much like incarcerated omental hernia, as in the following example:—

A man, aged forty-four, was admitted into the Glasgow Royal Infirmary on March 19th, 1884, and told us that he believed he had had a rupture on the right side for many years. It was small and reducible at first, but about seven years ago it greatly enlarged in the groin and gradually descended into the scrotum, where it still further enlarged. He averred that even then it was reducible in bed. He wore a truss, which did not at all keep it up, and seemed only to have pressed on the neck of the tumour. For the last eighteen months it had been quite irreducible and almost quite hard, but was painless to the touch. Such was the state of matters when on March 13th, six days before admission, the man was seized with violent pain in the lower part of the abdomen, but not any in the tumour. His bowels were easily and freely moved with medicine, and he had no sickness. Fomentations were applied and opiates given, so that when he came to the hospital the pain had been very greatly relieved. But the tumour is thus described in the ward journal: "It is about the size and shape of a large Duchess pear, the thin end passing up into the inguinal canal, while the bulk of it occupies the right side of the scrotum. It is at present painful to the touch, because the skin over it is red and œdematous. It is quite irreducible, and gives no impulse on coughing." His bowels had been freely opened the day before admission. Fomentations were applied, and next day castor oil was administered, and acted freely. The pain of the abdomen had ceased, but the tumour was unchanged, and remained so until April 2nd, when I explained to the man that without an operation he could not be relieved. To this he consented, and next day, having put him under chloroform, I cut down upon the tumour, and found it covered by the sheath of the cord, and closely adherent to it and to the testicle. There was not a particle of fluid in the sheath, and it was with difficulty separated from the surrounding parts; this was, however, effected by dissecting from beneath upwards. It was then seen that the narrow part of the tumour was enclosed in the inguinal canal, and adherent to it all round, and giving no sign of its passage into the abdomen. I incised fully one-half of the canal to make sure of this, and then, being quite satisfied that I had simply the fibrous neck of the tumour to deal with, I pierced it with a needle armed with a long chromatised catgut ligature, both ends of which I tied so as to surround the transfixed part, and then I cut it off below the ligature, having succeeded in saving both cord and testicle from injury. Lastly, I made a free opening through the lowest part of the scrotal cavity, which had contained the bulk of the tumour, and, having inserted a drainage-tube, stitched up the main wound. The usual antiseptic dressings were applied. On cutting into the tumour, it was found to be fibrous in its nature, and quite hard and solid throughout its entire extent; but on submitting sections of it to microscopical examination, it was found that the fibres were here and there separated by small masses of fat. In the future progress of the case nothing remarkable occurred. For a few days there was some swelling of the soft parts on the wounded side of the scrotum, and very little discharge of pus. Nevertheless, the wounds healed slowly, and it was not till April 26th, twenty-three days after the operation, that it was noted that they had quite closed up. The scrotum had then regained very nearly its natural size, and there was no hernial protrusion to be detected on the most violent coughing, whatever the position of the body. The patient was kept under observation in the hospital for some weeks longer, and then dismissed cured.

I must remark on this case that its early history does not seem to me quite reliable, but it is clear enough that the truss did not and could not do any good. Nay, I believe it rather increased the irritation and hastened the growth of the tumour by pressing on its neck. Of course it would, in some respects, have been better had the patient applied earlier for surgical assistance, for the tumour would then have been smaller and less adherent to the sheath of the cord. Indeed, one feels amazed that the very weight of the tumour did not cause him to seek its removal; but the truth is that these tumours seem to be so devoid of pain, and to affect the health so little, that few patients would submit to an operation even if proposed to them at an earlier period in the history of the growth, and such growths naturally increase so slowly that, unless irritated by wearing a truss, they may never cause trouble or inconvenience at all (even by their weight and bulk), and therefore may be safely let alone, especially if the patient is at or beyond middle age. Nevertheless, all such cases ought to be watched from time to time, and if there should occur pain or much increase of size, or any decided fixation of the tumour as from adhesions between it and the parts of the cord, an operation may then be considered desirable for its removal; but I do not, as a general rule, advocate a too ready recourse to the knife in such cases.

The only question which remains for consideration is the advisability of the patient's wearing a truss at the first. Now, take the case—and a rare one it must be—where one sees a patient while the tumour can be completely reduced above the internal opening of the canal. It may well be asked, What good could it do to keep the tumour inside the abdomen? and would its increase there not do more harm than if allowed to pass out of the canal? Then, in the commoner case, in which part of the tumour remains in the canal, it is obvious that the pressure of a truss may do harm, especially if the patient is a working man. But if it is allowed to remain there, it may next be asked, Will there be no danger of permitting the descent of a real hernia by the dilatation of the internal inguinal opening and of the canal itself caused by the presence of the tumour? Now, for my part, I think this fear unnecessary, for the tumour rather protects from such an occurrence by its presence and by the consolidation of the infundibuliform fascia which it naturally causes, and which was abundantly evident to me when operating in the case last related in this paper. Besides, there is, in all such cases, the unimpaired form and saccular continuity, if I may so call it, of the peritoneum, which we have good reason to think is in itself a protection against a hernial protrusion. On the whole, then, I do not recommend the use of a truss in these cases unless it relieves anxiety in the mind of the patient; but I should certainly forbid it if it caused any irritation or pain in the tumour. I need hardly add, in conclusion, that whenever symptoms of strangulation are present, it is the duty of the surgeon, without delay, to cut down on any tumour in the inguinal region, however doubtful he may be of its exact nature, and then to deal with it according to what he finds it to be.

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.[1]

BY GEORGE OLIVER, M.D. LOND.

NO. II.—THE PHYSIOLOGICAL AND CLINICAL ASPECTS OF THE BILE SALTS IN THE URINE.

AT the last meeting of the Leeds and West-Riding Medico-Chirurgical Society I demonstrated the capacity of an acidified solution of peptone as a practical test for the detection and quantitative observation of the biliary salts in the urine; and I showed how well adapted it is to serve clinical requirements in this direction. I now propose to bring forward such physiological and pathological data as this new instrument of clinical observation has brought within my grasp.

1. *The Renal Elimination of Biliary Salts in Normal Urine.*

Bile salts in healthy urine indicated by the peptone test.—Some few years ago that sagacious observer, the late Dr. Murchison, remarked that "not only in jaundice, but in health, a portion of the bile pigment, as well as of the bile acids, formed in the liver is absorbed into the blood"; if so, may we not expect to find a small quantity of the central components of the bile (the biliary salts), or a derivative of them, in healthy urine?—providing, of course, they are not completely broken up by chemical action,[2] and the mode of direct testing is sufficiently delicate for the purpose of detection. When it is remembered that in man the liver secretes on an average each day not less than four ounces[3] of bile salts, it will surely not be surprising if a fraction, as it were, of this large quantity should, under the ordinary conditions of health, get adrift from the portal into the general circulation, and be discharged by the kidneys; in fact, were the amount of these leading biliary constituents but half that just indicated, the non-appearance of a small portion of it in the urine would, I think, be regarded by most physiologists as improbable, being contrary to anticipation suggested by kindred data.[4] Certainly so far the biliary salts of the blood have not been isolated; but their absence cannot be inferred from this negative evidence, for the quantity is doubtless too small for separation and detection by the methods hitherto employed. It is not so, however, with the urine; for the bile acids have been separated by Naunyn and Draggendorf in healthy non-jaundiced urines; and lately Lépine and Guérin have shown that the greater part of that portion of the unoxidised sulphur present in the urine which is oxidised with difficulty by reagents is derived from the bile by the reabsorption of taurocholic acid.[5] Then, again, it has been demonstrated that taurin—derived from taurocholic acid—is eliminated in small quantity by the healthy kidney. I therefore conclude that the diminutive reaction of the peptone test solution with normal urines accords with the presence of a trace of bile salts discovered in them by physiological chemists.

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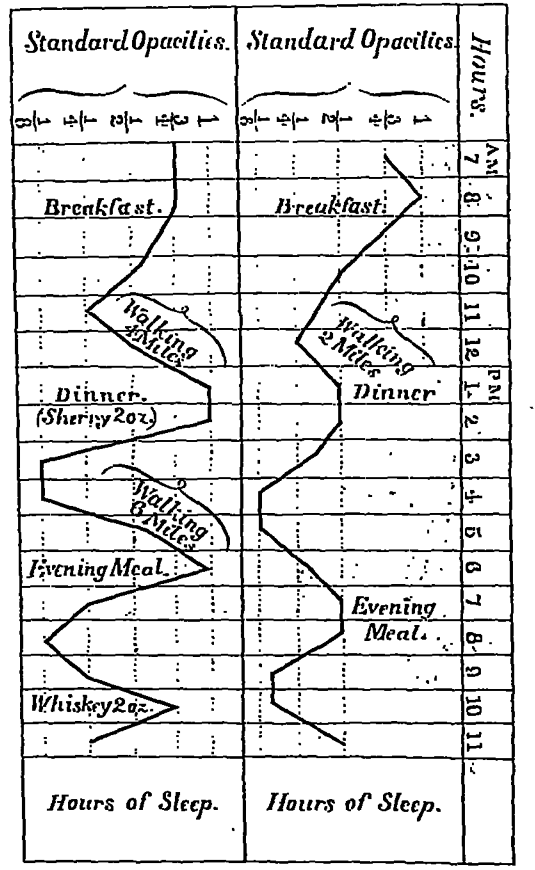
[1] Read before the Leeds and West-Riding Medico-Chirurgical Society, May 1st, 1885.

The amount of bile salts present in the normal urine of the same individual varies at different periods throughout the twenty-four hours; the causes of variation.—A large number of observations on the urine of healthy persons with the peptone solution has demonstrated the fact that the colourless biliary derivatives are discharged by the kidneys in varying proportions at different times in the course of the day. Though always present, they are increased at certain periods and diminished at others, and I find this variation definitely hinges on the digestive act.

The subjoined diagram represents hourly estimations of the bile salts in the urine of a healthy adult, aged forty-four, on two consecutive days, when every sample of urine was reduced to the uniform specific gravity of 1008, and the degrees of opacity, induced by mixing sixty minims of the diluted urine with the same quantity of the test solution, were registered according to a determined scale represented by the figures 1, ¾, ½, ¼, ⅛. It will be observed that the maximum amounts appear during the periods of fasting, as in the urine passed in the morning and before meals, and that the proportion falls quickly, generally in an hour, after each meal, and attains its minimum in from three to four hours. It would therefore appear that the renal elimination of the biliary salts is the converse of the bile flow into the duodenum; for, according to the facts provided by biliary fistulæ established in the dog, the discharge of bile into the bowel rises rapidly immediately after eating, reaches its maximum in from two to six hours, and returns to its minimum by the time of the next meal, but never ceases, even though fasting is prolonged. According to my observations, this central fact is modified by various hygienic conditions, among which exercise is the most powerful. On comparing the diagrams—one representing the subject walking only two miles, and the other ten miles—we note that, when the exercise was insufficient, the waves of increased elimination before dinner and the evening meal were imperfectly developed, attaining to merely the half standard opacity, and that when the walking was extended to ten miles the renal discharge of the biliary salts following the digestive fall reached the highest degree. It is pretty clear that moderate exercise invigorates the digestive process; for with a fair amount of walking between meals, the withdrawal of the bile salts from, as well as the return of them to, the urine, is rendered more decisive and speedy than when a lounging life is led. Indolence therefore either favours the retention of these colourless excreta within the systemic blood (cholæmia), or causes them to linger within the limits of the portal circulation, and prolongs each digestive effort. The systemic overflow of the biliary salts is probably influenced by other hygienic conditions: such as meteorological changes of temperature[6] and of atmospheric pressure, the nature of the diet, and alcohol. Though I have not yet studied with sufficient care the effects of alcohol on the renal elimination of these elements, I think I am justified by the few data observed in expressing the belief that in the first instance it is a checking agent, and then—after inducing congestion of the liver—it brings about an increased discharge, which may be even detected during the periods of digestion, when ordinarily the renal overflow of the biliary excreta is at its minimum. Should these positions be confirmed by further observation, it would seem as if alcohol should be classed with indolence as a cause of cholæmia and congestion of the portal system, and is therefore the opposite of exercise. It should be remembered that the urine of patients does not present such great variations in the amount of bile salts as are indicated by the diagrams constructed from hourly observations; for as a rule it is allowed to collect in the bladder for several hours together, and thus acquires a more uniform charge. When, however, the bladder is cleared just before a meal, the urine voided two or three hours afterwards will in health show the digestive withdrawal of the biliary salts. In order to judge of the renal elimination of these constituents the observer should select the urine of

The hourly Elimination of Bile Salts by the Urine, showing the Effects of Digestion and Exercise.



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[2] Frerichs as well as Murchison believed that the bile acids normally absorbed into the blood from the liver were metamorphosed by oxidation into other products.

[3] According to Bidder and Schmidt, the daily bile flow of a man weighing 140 lb. is about 50 oz., and the charge of bile salts over 8 per cent., or a little over 4 oz. If it be supposed that a portion of the bile discharged into the bowels is absorbed into the portal blood and is re-secreted, the fact of a large quantity of bile salts constantly circulating in the portal system still remains.

[4] My experimental data, derived from the observation of the viscera of the ox and sheep, show that during digestion the mesenteric glands contain more of the colourless biliary elements than the parenchyma of the liver. The amount that passes by this channel towards the blood is indeed very considerable. I hope to refer to this subject in the addendum to this paper.

[5] See THE LANCET, vol. i. 1885, p. 307.

[6] A chill, for instance, increases the urinary bile salts. This fact has, I take it, some bearing on the etiology of so-called "catarrhal" jaundice and hæmoglobinuria.

fasting, before breakfast, and of digestion, two hours after breakfast; or he should obtain a sample of the whole twenty-four hours' discharge.

2. *The Clinical Significance of the Renal Excretion of Biliary Salts.*

Data provided by experiments on animals.—A review of the facts provided by the injection of the bile salts into the blood of animals (mainly dogs) forms a fitting introduction to the study of the clinical aspects of the renal excretion of these colourless biliary derivatives. The following symptoms and structural changes have been recorded by several observers (Feltz, Kitter, Röhrig, Albers, and others). (*a*) Pulse and respiration retarded. (*b*) Arterial tension and temperature lowered. (*c*) Food refused, and loss of flesh rapid; vomiting of bile and blood. (*d*) Diarrhœa: bilious, sometimes bloody. (*e*) Hæmolytic changes, capillaries obstructed and hæmorrhages. The blood more fluid than normal, and less coagulable. The red discs dissolved,[7] and the serum red-coloured from liberated hæmoglobin, and milky from fat granules and increase of fat. The passage of the blood obstructed in the capillaries: the red discs flow together *en masse.* (*f*) Parenchymatous degeneration of glands, muscles, liver, kidneys, &c. (*g*) Tetanic convulsions, followed by coma and death. (*h*) Urine albuminous, and red from dissolved hæmoglobin. The symptoms and tissue changes vary with the amount of bile salts injected: thus, it is always needful to administer certain large and repeated doses in order to induce convulsions, coma, and death; but a small quantity will produce the analogue of a bilious attack, when there is merely observed retardation of pulse and respiration, lowering of arterial tension, refusal of food, vomiting, and perhaps diarrhœa.

The balance between production and elimination.—The biliary products discharged into the bowels are mainly utilised in digestive work; and a certain comparatively small portion of them must pass out with the fæces, or good health is out of question; unless, perhaps, the renal elimination can in some degree compensate for the intestinal failure. As a rule, however, when either of these channels, by which biliary matter is normally excreted, is obstructed, and, above all, when both are embarrased or blocked, the blood becomes surcharged with the poisonous excreta (cholæmia), and then the experiments on animals become living facts in our clinical experience: the form of blood-poisoning being acute or chronic, mild or severe, or individualised by idiosyncrasy of tissue, or by special concomitant conditions, such as fever and the like. When, therefore, the balance which subsists in health between the production of these poisonous products and their elimination is disturbed, disorder or disease is induced; as surely as the smoky atmosphere of a room is the natural consequence of a narrowed or obstructed chimney. The clinical observation of the bile salts in the urine appears to me to resolve itself into the detection of an excess and of a check to elimination or of an insufficient discharge.

(*To be continued.*)

A NEW METHOD OF ADMINISTERING AND ECONOMISING NITROUS OXIDE GAS.

BY FREDERIC HEWITT, B.A., M.B. CANTAB.,

ADMINISTRATOR OF ANÆSTHETICS TO CHARING-CROSS AND THE NATIONAL DENTAL HOSPITALS.

IT has been stated that pure nitrous oxide gas when inhaled is not decomposed, and that the expired gases from a patient under its influence contain no products of decomposition which can be attributed to chemical changes in the gas during its period of association with the circulating blood. Experiments have been made not only in support of this statement, but also to prove that nitrous oxide gas is absorbed to a considerable extent by the blood.

If nitrous oxide is exhaled in much the same condition as it is inhaled, what are the reasons against our employing a comparatively small amount of it over and over again for anæsthetising a patient? If a bag containing two gallons of gas be taken, and its contents inhaled and exhaled through a face-piece devoid of valves, an imperfect form of anæsthesia is as a rule obtained. I have tried this method on several patients, some of whom have been satisfactorily anæsthetised; but as a general rule struggling and excitement supervene and become more marked during the ensuing operation, whilst the corneæ retain their sensibility for a considerable period. Sometimes, indeed, it becomes impossible to render a patient sufficiently unconscious for operative procedures. The reason of these untoward manifestations is obvious; the air which was originally present in the respiratory passages dilutes the small amount of gas to such an extent that the usual evidences of the gas having become mixed with atmospheric air ensue. The carbonic anhydride which is exhaled is supposed by many to intensify the action of the nitrous oxide; but may it not have the effect in the above experiment of rendering the nitrous oxide anæsthesia imperfect, considering that such a small amount of gas is taken for inhalation? Mr. Coleman was in the habit of causing the carbonic anhydride to be absorbed by passing the exhaled gas over lime. By these means he endeavoured to economise the nitrous oxide, but the method soon fell into disuse. The apparatus he used was cumbrous, and I do not know whether he ever took means to prevent the air originally present in the lungs from becoming mixed with the gas.

If we admit that nitrous oxide is not decomposed by the blood, and if means are taken to first get rid of air in the lungs—to wash out, as it were, the respiratory passages by nitrous oxide,—it seems to me that, with a small amount of the latter gas, it should be possible to induce a satisfactory form of anæsthesia by allowing the patient to breathe the gas over and over again. The carbonic anhydride which will still be exhaled will, according to some, be rather an advantage than otherwise; but if there is reason to believe that this gas intensifies the action of the nitrous oxide by producing an anæsthesia of its own, or if there is reason to suppose that it acts somewhat as a diluent to the nitrous oxide, then it follows that, by first flushing out the lungs by nitrous oxide, and, secondly, by depriving the circulating gas of its carbonic anhydride, it should be possible to employ a comparatively small amount of nitrous oxide with the same satisfactory result as that which obtains when a large amount is inhaled and exhaled in the usual manner.

With the object of inquiring into the above interesting questions I had occasion to devise a face-piece which I shall describe below. By the use of this face-piece I was enabled, without removing it from the patient's face, to allow a portion of the contents of a two-gallon bag filled with nitrous oxide to escape, after inhalation, through an expiratory valve, and then, by suddenly depressing a small rod, to cut off all valve action, and to allow the patient to inspire and expire the gas remaining in the bag. I spoke to my friend Dr. Percy Frankland, and he has been kind enough to make with me some analyses of expired gas from patients under the influence of nitrous oxide. These analyses we hope to be able to publish shortly. In the meantime I venture to describe the face-piece used in my experiments, as by its employment I have anæsthetised satisfactorily more than a hundred patients at the National Dental Hospital, using for each administration not more than two gallons of gas.

I have collected samples of expired gas under three different conditions:—1. Two gallons of gas employed. Face-piece without valves. 2. Two gallons of gas employed. Face-piece as in woodcut. Varying amounts of this gas exhaled into air before allowing the patient to breathe in and out of the bag. 3. Several gallons of gas inhaled from a gasometer and exhaled into air; having thus disposed of air in the chest, the patient was made to breathe and rebreathe two gallons of gas, previously placed in communication with the face-piece. When employed with certain simple precautions, the method adopted in the second series of experiments gave, as a rule, very satisfactory results. With regard to the carbonic anhydride exhaled, I shall abstain from making any remarks until the analyses are completed. The method which I have used for absorbing this gas is to allow the inhaled and exhaled gases to pass between two thin-walled cylinders of india-rubber sponge, soaked in a saturated solution of caustic potash. I have not made a sufficient number of experiments to arrive at any definite conclusion as to the advisability of absorbing carbonic anhydride when a small amount of gas is used for inhalation. The method I shall presently describe does not provide for the absorption of carbonic anhydride

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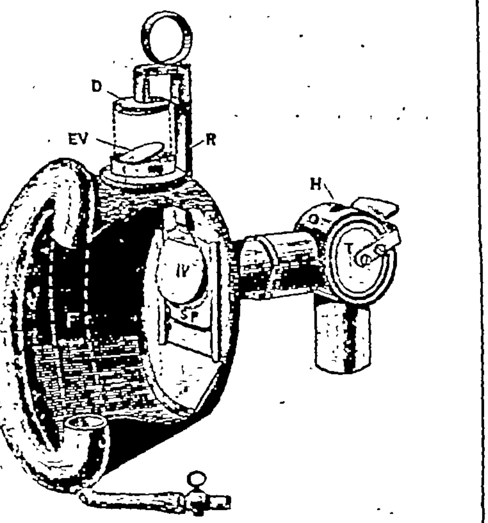
[7] When a solution of the bile salts is added to a drop of blood, under the microscope the corpuscles rapidly disappear. Hünefed was, I believe, the first to record, some forty years ago, the fact that bile dissolved the blood-corpuscles.

Whether the absorption of this gas would have the effect of rendering the anæsthesia even more perfect remains to be seen by experiment.

I now propose to describe the apparatus before alluded to, (see woodcut). The face-piece (F) is furnished with two valves, an inspiratory valve (IV), and an expiratory valve (EV). The inspiratory valve (IV) is mounted upon the sliding plate (SP), which can be moved up and down by the rod (R) which is attached to it. When the plate (SP) is raised, as in the woodcut, the valve (IV) is in contact with the orifice of the tube coming from the two-way stopcock (T), and gas rushes past it during inspiration, but not during expiration; when, however, the plate is pushed down by the rod (R), the valve (IV) is also displaced, and gas can pass backwards and forwards through the orifice previously guarded by the valve (IV). The expiratory valve (EV) is situated upon the upper part of the face-piece. When the rod (R) is raised, as in the woodcut, the valve (EV) is capable of acting during expiration; when, however, the rod (R) is depressed, the circular damper (D) is pushed down upon the valve (EV), and the latter is rendered inactive. It will therefore be seen that when the rod (R) is raised, both valves are capable of acting; when, however, the rod (R) is depressed, all valve action is suddenly abolished, and gas can only pass in and out of the orifice of the tube previously guarded by the valve (IV), the rod (R) which necessarily comes over this orifice offering practically no obstruction to the passage of the gas. The two-way stopcock (T) s fixed on the one side to the face-piece (F), and on the other to a piece of tubing connected to a Cattlin bag holding wo gallons of gas. The latter (as is commonly the case) is illed from the gas-bottle through a stout piece of india-rubber tubing; and I have found it convenient to have a small stopcock with a bayonet joint interposed between the bag and the gas-bottle, so that the two may be quickly and readily disconnected, if necessary. The anæsthetist can, under these circumstances, attach the bag by any simple contrivance to his coat button, and with the two gallons of gas and the face-piece he is equipped for most short operations.



The following are the details of the method: the bag and the tubing between it and the face-piece having been filled with gas (by placing the two-way stopcock as in the figure), the face-piece (which is also arranged as shown), is accurately fitted to the patient's face. It will be seen that the face-piece is so made that it can be grasped firmly at its back part by the hand of the anæsthetist, whose forefinger and thumb will then be able to press its sides over the nose of the patient. Inspiration now takes place through the air-hole (H) of the two-way stopcock, and expiration takes place through the valve (EV). I am in the habit of testing the fitting of the face-piece by placing my finger for a moment over the air-hole (H), and then asking the patient to "try to breathe." If no air enters at any part, the sides of the face-piece will be observed to fall in as the tendency towards a vacuum is set up; whereas if air should gain admission (as it sometimes does) between the face-piece and the face, there will be slight, if any, falling in of the sides of the former, and, in all probability, some noise of in-rushing air will be audible. Having adjusted the face-piece satisfactorily, gas is turned on at the stopcock (T), and a certain number of expirations are allowed to escape through the valve (EV). As far as my experience goes, it is best to allow nearly one-half of the contents of the bag to be inhaled, and then exhaled into the surrounding atmosphere; and to effect this, four or five respirations are usually requisite. The rod (R) is then depressed. The patient now breathes directly in and out of the bag, and the usual evidences of anæsthesia ensue. The total number of respirations necessary will, of course, vary with each individual patient; the average number in one hundred cases was forty-five. I usually wait for some slight twitching of the muscles before removing the face-piece. The period of anæsthesia which ensues is, I think, not quite so long as that which is met with under ordinary circumstances, although Mr. Read, one of the dental surgeons at the National Dental Hospital, assures me that he sees no difference in this respect between the anæsthesia which is obtained by using plenty of nitrous oxide and that induced by administering two gallons in the manner I have described. I have been unable to ascribe any unusual after-effects to this mode of administering the gas. Further experience is necessary before more detailed comparisons can be made between the anæsthesia thus induced and that obtained by employing several gallons of gas.

The experience I have had in the above method of administering nitrous oxide gas has led me to the conclusion that it can be employed in all short operations, especially in hospitals where economy has to be considered. I believe that the average amount of nitrous oxide used for each patient at the National Dental Hospital is five or six gallons when the ordinary apparatus is employed. At hospitals where small fees are charged for the privilege of having the gas administered, it might be possible to reduce or abolish these fees, except under special circumstances.

Economy in nitrous oxide is doubtless to be secured in others ways than that which I have mentioned. Many anæsthetists use the "Supplemental Bag," which can be adapted to ordinary face-pieces, and by its use less gas is certainly necessary than under ordinary circumstances. How much less will, of course, depend upon various conditions. I believe, however, that, as a rule, it is necessary to use a great deal more than two gallons of gas. If two gallons of gas will suffice for short operations, it may be found practicable for the anæsthetist who is called to administer gas to one patient either to dispense with the heavy gas-bottle or to substitute for it a much smaller and more portable one.

Mr. Hawksley of 357, Oxford-street, is the maker of the face-piece; and I have to thank him for the care and attention with which he has carried out my instructions.

Somerset-street, Portman-square, W.

NOTE ON A

CASE OF OSTEO-ENCHONDROMA OF THE CEREBELLUM.[1]

BY CHARLES ATKIN, F.R.C.S. ENG.,

HOUSE SURGEON, INFIRMARY, SHEFFIELD.

MR. SHAW, of Attercliffe, Sheffield, in making the post-mortem examination on the body of a boy aged eleven, found a hard bony substance in the right lobe of the cerebellum. The cause of death was meningitis following otorrhœa of only three weeks' history. In the right lobe of the cerebellum, embedded in the substance of the organ underneath the grey matter, was a hard body about the size of a bean, half an inch by three-eighths of an inch, weighing seventeen grains. It was not enclosed in a cyst or surrounded by any undue vascularity or softening, and had apparently nothing to do with the cause of death. It was single, no smaller one being in the neighbourhood, quite firm and hard, giving at once the idea that it consisted of bony tissue. The mother stated that he has always been a delicate boy, especially up to the age of four, suffering from "water on the head," that he was late in teething, had never had scarlet fever or measles, and had always been lively, attentive, and quick at learning. The parents were apparently healthy, though the father had a strumous phthisical appearance, and three brothers aged respectively nineteen, fourteen, and nine all had otorrhœa.

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[1] Read before the Sheffield Medico-Chirurgical Society, April 23rd, 1885.

The interest of the case lies chiefly in the origin and nature of the growth. After decalcification the bony tumour was carefully cut in two, one half being cut up into sections for the microscope and the other preserved in spirit. On viewing the cut surface the growth was seen to consist of two portions: one, a central nucleus with prolongations, and the other surrounding tissue of evidently different structure. Under the microscope four different tissues are seen—first, the stellate nucleus, consisting of fine granular matter readily taking aniline colours, staining yellow with picro-carmine; secondly, well-marked hyaline cartilage, forming a complete capsule for the nucleus, which sends its prolongations in and amongst it in a very irregular manner; thirdly, some true bone, and most externally parallel bundles of fibro-cellular tissue, which were, previous to decalcification, as hard as bone. There is no doubt that the tumour is perfectly innocent; it is not a chondrifying or calcifying sarcoma; it is not a mass of brain sand. In the granular centre, brain elements, such as Deiter's cells or Purkinje's corpuscles, are absent. One might imagine that it might be degenerated additamentary corpus dentatum, but even then the stellate cells are wanting. Is the nucleus of the tumour hypertrophied neuroglia due to circumscribed encephalitis? I have searched for records of similar growths, but have found nothing at all comparable to it. Calcifications of tumours of the brain are uncommon, but still well known. Bevan Lewis has recorded a calcified angioma, and Ross quotes one by Meschede. As well as with regard to its seat and the fact of its causing no symptoms, it is curious in another way—viz., that it is an exception to the rule that heterologous enchondromata are generally malignant.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—Morgagni *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

GUY'S HOSPITAL.

DISTENSION OF FRONTAL SINUS TREATED BY INCISION AND DRAINAGE; CURE.

(Under the care of Mr. Higgens.)

Distension of the frontal sinuses from the accumulation of fluid is somewhat rare, especially when the fluid is non-purulent. Incision, with the application of the trephine, when the bone has not been absorbed from pressure or removed by disease, followed by free drainage, is the best treatment. In addition to the ordinary external opening, Mr. Higgens made one from the distended sinus into the nasal cavity, thus providing further drainage and allowing the external wound to close at an earlier date.

Eliza H——, aged eleven, admitted July 20th, 1884. The history was that usually given in these cases—a blow across the nose from a fall six or seven years previously. Some eighteen months later the child had scarlet fever, and at that time a small abscess formed at the inner canthus of the right eye; this burst and gave no further trouble. Two years ago the right eye began to water, and a swelling appeared at the side of the nose; this has gradually increased. On admission there was a fluctuating swelling surrounded by irregular bony edges, situated at the inner angle of the right orbit rather above the position of the lacrymal sac. The swelling is rather larger when the patient is in the erect position than when lying down; it is also rather smaller in the morning than later in the day.

July 21st.—An incision made into the swelling gave exit to a large quantity of thick, opaque, yellowish discharge; the finger passed through the incision entered a considerable cavity. An opening was made through the lower part of the cavity into the superior meatus of the nose, and a drainage-tube passed through it and out at the right nostril, and left with one end projecting through the incision and the other through the nostril. The drainage-tube remained in position till November 10th (nearly four months), when it was removed.

Dec. 8th.—Opening where drainage-tube projected quite closed; replaced by small depressed cicatrix. An irregular bony edge can still be felt, but the fluctuating swelling has entirely disappeared.

LIVERPOOL ROYAL INFIRMARY.

SUICIDAL WOUND OF NECK TREATED BY TRACHEOTOMY AND THE INSERTION OF DEEP SUTURES; REMARKS.

(Under the care of Mr. Reginald Harrison.)

For the following notes we are indebted to Mr. H. Pearson.

H. O——, aged fifty-six, no occupation, a weakly and ill-nourished looking man, was brought to the Royal Infirmary early on the morning of July 29th, 1884, with a severe wound in the neck, as follows: There was a deep cut on a level with the upper border of the thyroid cartilage, and extending, on the surface, about two inches to either side of the middle line; this wound, inflicted by a razor, passed horizontally backwards, so as to divide all the structures attached to the upper border of the thyroid cartilage, and, still deeper, dividing the pharynx nearly half way through. On making efforts at swallowing, the thyroid cartilage moved upwards and forwards through the wound in a most curious way. It was stated that he had lost a quantity of blood, but there was no bleeding of consequence on his arrival at the hospital. The following treatment at once suggested itself: to perform tracheotomy, and then to bring the divided parts together with strong deep wire sutures. To the attainment of this object the patient was anæsthetised, and the trachea opened above the isthmus; a large tube was inserted so that respiration might be as free as possible; next, the base of the epiglottis, which on being released from the thyroid cartilage had become tilted upwards and backwards, was drawn down and fixed to the centre of the upper border of the thyroid cartilage by means of a medium-sized wire suture; then, by means of a curved mounted needle, a strong wire was passed on either side through the upper part of the lateral wing of the thyroid cartilage and carried around the hyoid bone; on tightening these two sutures the deep soft parts were brought neatly together, and the hyoid bone maintained in its proper relation to the thyroid cartilage; finally, the surface wound was neatly closed over the deep sutures by means of fine silver wire. The man was kept in bed surrounded by a tent, the temperature of the room maintained at 65°, and the air constantly moistened by a steam kettle; two ounces of sanitas to each large kettleful of water served very well to keep the atmosphere pleasant and sweet. He was ordered to have milk and beef-tea thrice daily through an œsophageal tube, also beef-tea night and morning by the rectum. He was troubled a little with slight bronchial irritation for a few days afterwards, but his temperature never rose above 102·2°. The greater part of the wound united rapidly, leaving only a fine fistulous tract leading from the pharynx to the right angle of the cicatrix. As this opening showed no tendency to heal, a plastic procedure was resorted to on Aug. 29th—viz., the tract was thoroughly scraped with a Volckmann's spoon, and the walls of the fistula brought together by means of a strong deep suture; this was then covered in by bringing together the edges of the previously dissected up skin. This wound united kindly, and on Sept. 12th the tracheotomy tube was removed, and on the 18th (a week before his discharge), this last wound having closed, the patient was permitted to take soft solid food by the mouth.

Remarks by Mr. Harrison.—This wound was so large that it was quite out of the question to leave it to heal without maintaining the divided structures in good position, and moreover, to this end, it appeared a necessity to have free respiration below the site of injury. Similar treatment seems to suggest itself as commendable and safe for wounds of much less extent than the above, if not, indeed, to all cases of cut-throat whenever the pharynx or larynx has been laid in communication with the surface of the neck. The four deep sutures used had, up to the time of the patient's discharge, shown no symptoms of causing any trouble. The man has not been heard of at the infirmary since his discharge in a mood far from penitent.

SHEFFIELD GENERAL INFIRMARY.

A SERIES OF UNCOMMON GROWTHS.

(Under the care of Messrs. Favell and A. Jackson.)

For the following notes we are indebted to Mr. Charles Atkin, house-surgeon.

Case 1. *Congenital Coccygeal Tumour; Removal; Death; Necropsy.*—M. L——, aged four months, was brought to the infirmary for a swelling of the upper part and right side of the buttock. The lump was noticed at birth, and it was doubtful whether it had increased at all since, but the parents wished something to be done if possible, as they imagined it interfered with the well-being of the child. The father is phthisical; the mother, strong and healthy, gives a history of fright and a fall whilst pregnant with the child, which at its birth had "convulsions." Up to the present it, however, had only suffered from sleeplessness and gastric disturbances. On examination a semi-solid mass the size of a small orange was found protruding from the right side of the sacrum; it apparently increased in size on crying; the skin over it was adherent, nævoid, and puckered; it involved the coccyx, no extremity being detected. On the left side of the middle line the sacrum was entirely wanting, and the movement of the abdominal contents could easily be detected when the child cried. Double equino varus was also present. Mr. Jackson determined to explore it; so a small incision was made on the most solid portion of the swelling and the skin carefully dissected away. On the growth being removed, it was discovered that the rectum lay uncovered beneath. The tumour was then seen to consist of a mass of lobules, chiefly of hard dense fat bound together by connective tissue; interspersed were small cartilaginous masses, and one or two cysts about the size of a pea, containing opaque pale-green fluid, which under the microscope showed nothing but epithelial and cellular débris. The child progressed favourably for three days, taking the breast well, and then, unaccountably, rapidly failed and sank. At the autopsy the remains of a tumour were found attached by a pedicle to the right half of the sacrum; the left side was deficient, being only represented by a fibrous band. The growth did not encroach on the anterior surface; there was no meningitis, and the organs were healthy. Microscopically, the greater portion of the tumour removed was found to consist of fat and bundles of wavy fibrous tissue; the arteries were numerous and well formed; masses of hyaline cartilage, of most irregular shapes, were embedded in fibrous tissue; there were cysts, with thin regularly concentric walls, filled with semi-transparent yellowish granular material; and, most curious of all, transverse sections of what appeared to be well-made ducts lined with nucleated columnar-celled epithelium. These ducts were closely aggregated together in a mass of fibrous tissue; in some the epithelium was so well developed that it completely filled up the lumen of the tube, and gave the appearance of a rosette, a central axis with radiating spokes; in others the cells had shrunken from the walls towards the centre; in others, again, the cells were absent, no doubt washed away in the process of mounting. In no place was there any trace of sarcomatous or carcinoma cells, or any arrangement of tissue or cells at all resembling them. There was no trace of any bony tissue or hairs.

Case 2. *Epithelioma of the Ear, involving the Facial Nerve.*—T. H——, aged seventy-seven, was admitted into the infirmary in a very debilitated condition. His previous history had been very good; never had syphilis or any serious illness; no history of cancer in the family. Had noticed a wart on his left ear for the last five years, which used to bleed when it was knocked or rubbed by his hat. He went to a quack, who cauterised it with some strong acid twelve months ago; the wart never returned, but the sore thereby induced never healed. It has gradually increased in size, and occasionally bleeds very violently, especially after a fit of coughing. On examination the whole of the pinna was found to have been replaced by a mass of ulcerating new growth; the edges were raised, everted slightly, and indurated; the neighbouring skin, especially about the mastoid region, was dusky red and brawny, evidently infiltrated with new growth. The discharge consisted of sanious pus, foul smelling, but not very profuse. Under the microscope epithelioid cells were found. On the whole there were well-marked evidences of "new growth," though so much ulceration was present. There were also inability to close the eye, falling of the angle of the mouth, deviation of the tongue to the left on protrusion, all tending to show that the infiltration had reached and invaded the facial nerve. He was also completely deaf on the left side. The case having evidently gone too far for operation, he was kept in and watched, for some months he lingered, ultimately dying of exhaustion, partly induced by extensive bedsores which he had acquired previous to his entry into the infirmary. Microscopic sections of the growth showed it to be a typical epithelioma.

Case 3. *Congenital Sublingual Dermoid Cyst; Operation; Recovery.*—E. O——, a girl of seventeen, applied at the infirmary with a swelling underneath her tongue as large as a small orange; it filled her mouth, nearly completely forcing the tongue up against the palate, so that she could not possibly swallow solids. She was otherwise healthy, and stated that she had always a small lump there as long as she could remember, but that it had only increased in size the last nine months. She had already been under a medical man, who had first treated it with a seton and then incised it; but it had returned and increased beyond its former bulk. On seizing the front portion of it with forceps and snipping away a considerable part of the anterior wall, a large quantity of thick sebaceous matter presented itself, in which hairs were intermixed. The wound rapidly contracted and healed, and there has been no return, nine months after.

Case 4. *Large Epithelioma of the Lower Lip in a Female; Operation; no Recurrence a year later.*—R. W——, aged thirty-seven, stated that she was married, no children, always been very strong and healthy, and knew of no "lumps or sores" in the family. Ten months ago she first noticed something wrong with her lower lip; a pimple formed at the edge, then a crack, which continually scabbed over. On examination, the edge of the lower lip was found to consist of a dirty, dark, discharging ulcer, extending from the median line to the angle of the mouth on the right side. Below it the skin was hard, tender, dark-red, and irregularly raised, extending two inches and a half downwards and outwards; in fact, the ulcer and infiltrated skin comprised the whole distance from the edge of the lip to the lower border of the jaw, and behind to the anterior edge of the masseter muscle. In appearance she was stout and plethoric-looking. She had no sharp bad teeth, no mole on the lower lip, though there was on the upper. She can assign no cause, as she has never irritated her lips. The ulcer and neighbouring skin were completely removed by Mr. Favell, the parts coming together only at the expense of the size of her mouth; however, healing took place perfectly, and though her mouth was very much diminished in size, she went out very well satisfied with her personal appearance. It is now exactly twelve months ago since the operation, and there has been no recurrence of the disease. Under the microscope the specimen is seen to be a perfect one of epithelioma.

Case 5. *Scirrhus of the Prostate Gland: Suppression of Urine; Death: Necropsy.*—W. S——, aged sixty-nine, was admitted with hæmaturia. He was remarkably hale and active for his age, with plenty of colour, and stated that he had always been a very sober and healthy man. His father and mother had both died at a very advanced age. Six or seven months ago he noticed that his water scalded him and was tinged with blood. On admission he complained of pain at the end of the penis and in the perineum, especially when he had his bowels moved. Riding and jolting had not been noticed to increase the pain, which was very severe, however, during micturition. The stream of urine never stopped suddenly. Never passed any gravel, but occasionally clots. Never remembers any matter or slime coming away from him. He stated that he had got much thinner and weaker lately. Examination with the sound yielded no results, nor did microscopical examination of the urine. By the rectum the prostate was detected to be increased in size, and was evidently very tender. For some time he was treated with astringents, and enjoined rest in bed; he apparently improved, till one day he found he could not pass any urine. A catheter was passed, but only a few drops came away; this state of things happened each day; percussion and palpation, as well as sounding the bladder, showed that it was always more or less empty. However, he gradually got weaker; and though the temperature was normal and the pulse slightly accelerated, he only complained of thirst, and protruded a dry brown tongue. He had no uræmic symptoms, so-called, no twitchings, delusions, or coma, and was quite sensible up to his death, which seemed to occur simply from asthenia. At the post-mortem examination the bladder was found empty, with thickened walls, but no pouches or evidences of cystitis. The ureters were slightly dilated; the kidneys large and pale, but otherwise healthy; the prostate was enlarged to three or four times its usual size, the growth, however, not interfering with the patency of the urethra. On section it presented unmistakable appearances of new growth, being firm in parts, fibrous, and of a yellowish-white colour. There was no ulceration of the mucous membrane. Microscopically it presented the arrangement of a scirrhous carcinoma.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

Tumour of Brain.—Malignant Disease of Bones in a Child.—Sarcoma of Lung and Brain.—Primary Carcinoma of Liver.—Hypertrophied Callus of Tibia and Fibula.—Chronic Cerebro-spinal Meningitis.—Actinomycosis.—Typhoid Fever in Animals.

THE last meeting but one of the present session of this Society took place on Tuesday last, Dr. H. Charlton Bastian, F.R.S., Vice-President, in the chair. The proceedings were of a very interesting character, and good discussions followed the reading of most of the papers. The specimens of actinomycosis showed by Mr. Shattock prove that the disease, though but recently recognised, is certainly not new, seeing that the specimens exhibited were at least a quarter of a century old. The specimen of hypertrophied callus shown by Mr. Bilton Pollard was remarked upon as one of an exceedingly rare kind, and on the motion of Mr. Butlin the specimen was referred to the Morbid Growths Committee for special report.

Dr. CHARLEWOOD TURNER showed a Cerebral Tumour, situate in the fourth ventricle, with a secondary deposit on the posterior surface of the cord, and with lesions of the posterior columns of the cord. The specimen was taken from a girl aged fifteen, who had had symptoms of cerebral tumour for nine months; amaurosis had been noted for two months; vomiting, headache, and pain in the left leg and side were present, and also double optic neuritis. The pupils were widely dilated, but active. There was slight paresis of the left side, but no loss of sensation. The deep reflexes were absent. The superficial reflexes were active. The intellect was unaffected. Paralysis of the left side of the face, followed by an epileptiform attack, ushered in death. A soft sarcomatous growth was found filling up the fourth ventricle, from the walls of which it appeared to have grown, invading the cerebellum and medulla oblongata. Microscopical examination showed much exudation in the posterior columns of the cord. The greater liability of the posterior surface of the cord to be affected with new growths was commented on. The limitation of the spinal lesion to the posterior columns in this case, and the occurrence of early sclerosis of the same columns, were regarded as illustrating the especial liability of these columns of the cord to be the seat of pathological lesions. This afforded an explanation of the frequency of locomotor ataxy as compared with the symptoms referable to primary lesion of other tracts of the cord. The occurrence of cases where the characteristic symptoms of locomotor ataxy are independent of spinal lesion is not inconsistent with the general conclusions from an investigation of thirty years. They prove that these symptoms are not essentially spinal. Symptoms due to lesion of centripetal fibres of the posterior columns result most frequently from interference at the least protected part. There were no facts to show that there is a greater liability for this to occur in the brain, and no evidence of a cerebral lesion in cases of ataxy in general to which the posterior sclerosis could be regarded as secondary.

Dr. NORMAN MOORE exhibited a specimen of Sarcoma of Bones and Viscera in an Infant. The specimens were taken from a boy aged one year and a half, who died in St. Bartholomew's Hospital in one of Dr. Gee's wards. The whole anterior part and most of the base of the skull were infiltrated with huge masses of a tough reddish new growth, which microscopic sections showed to be a round-celled sarcoma. Many other bones were infiltrated. The ten upper left ribs and nine lower right ribs, the whole pelvis, and both femora were infiltrated, and had upon them many bosses of the sarcoma. All the lumbar and cervical glands, the right lobe of the liver, and the right suprarenal body contained masses of the new growth. The case began with pain in the right hip in October, 1884. In December a swelling was noticed over the eye. This was rapidly succeeded by swellings on other parts of the skull. Both eyes were extremely depressed, and the corneæ sloughed away. The growth increased very fast, and the child died on March 3rd, 1885.

Dr. DYCE DUCKWORTH showed specimens of Sarcoma of the Lung and Brain. The case was that of a man aged fifty-two, who was admitted into St. Bartholomew's Hospital in February, 1885. At Christmas last a left hemiplegia developed after an apoplectiform attack. The early symptoms of the lung disease were cough with copious expectoration. There was impaired expansion of the right side of the chest, with dulness over the lower half of the right side, where the vocal fremitus was absent, and the breathing was very weak. Weakness, pain in the chest, and cough, with hæmoptysis, were the symptoms prior to admission. There was slight fever. Death followed eight days after admission into the hospital. In the corpus striatum of the right side was a pinkish velvety mass about the size of a hazel nut, and many similar nodules were found in the roof of the lateral ventricles and elsewhere. A new growth penetrated the right lung, apparently commencing at the root of the organ; the growth followed the course of the bronchi, but did not find its way through the mucous membrane of the tubes, and remained entirely outside the bronchi. There were about six nodules in the liver and one in the pancreas. The growth was a round-celled sarcoma. He had not found any similar case on record in the Society's Transactions.—Dr. CHARLTON BASTIAN asked what was the condition of the temperature.—Dr. NORMAN MOORE said that the temperature chart showed a general rise in the evening to about 101° F.; occasionally the temperature was 103°. He thought that Dr. Duckworth's case was a most interesting one.—Dr. ORMEROD spoke of the means of distinguishing between the hemiplegia resulting from a tumour and that resulting from vascular disease; if optic neuritis were present, then a tumour might be diagnosed.—Dr. DYCE DUCKWORTH said that the case had not been diagnosed during life. The eyes had not been examined.

Mr. PAUL showed a group of specimens of Primary Tumours of the Liver. These specimens represented good types of the different varieties of epithelial new growths of the liver. The first specimen was taken from a woman aged forty-four; there was a bright-green-coloured nodule, encapsuled and attached to a large branch of the portal canal in the centre of the liver. In the midst of the growth was some inspissated material of a green colour. This tumour was an innocent growth of glandular type. The remainder of the liver was cirrhotic in character. The second specimen was removed from a woman aged fifty who died of pleuritic effusion. The liver was in a state of red atrophy, with fatty infiltration. Several white nodules, not encapsuled nor differentiated from the surrounding tissue, were composed entirely of liver tissue. The cells had a trabecular arrangement, and they had a luxuriant growth, and the capillaries were not largely dilated, as they were in the remainder of the atrophied liver. The next specimen was one of primary carcinoma of the liver, which had also a green colour. It was removed from the body of a Scotchman aged sixty-nine; there was no emaciation. Malaise followed by jaundice and ascites, with rapid death from exhaustion, were the chief clinical features. The growth had spread into the portal vein, and the liver weighed 110 ounces, and was very large. The tumour was soft and diffluent, and of a bright-green colour. There were no secondary growths. The dark-green inspissated material was apparently secreted by the cells of the carcinoma. The hepatic character of the cells was commented on. The fourth case was one of scirrhus and cirrhosis of the liver. The fifth case was that of a woman aged forty-eight, who had had jaundice and ascites with hæmorrhage into the peritoneum. The new growth was of a green and yellow colour, and extended into the portal vein. The cells were more uniform and more strikingly hepatic in nature than those of the previous specimen. There was evidence of a direct conversion of the hepatic cells into carcinoma. The sixth specimen was one of cirrhosis and a soft form of carcinoma, which infiltrated the organ and the portal vein. The liver weighed sixty-six ounces, and the tumour was of a bright-yellow colour, probably from rapid fatty degeneration; it was an alveolar carcinoma. The last case was one in which rapid emaciation took place, and the disease lasted three months; the portal vein was distended with carcinoma, and in this specimen also a rapid fatty degeneration had taken place. The first two specimens were examples of growths of an innocent character. The acinous and tubular varieties were illustrated. The other growths were examples of the acinous form of carcinoma; specimens of the tubular form of carcinoma had been brought before the Society by Drs. Mahomed, Greenfield, Pye-Smith, and others.—Dr. C. TURNER asked whether the first two specimens might not be regarded as examples of local hypertrophy of the liver, such as was met with in the suprarenal capsules and in the thyroid body.—Mr. PAUL thought it difficult to draw a hard-and-fast line between local hypertrophy and adenoma.—Mr. S. G. SHATTOCK had seen a specimen the exact counterpart of the third specimen; it had a curious pigmented appearance, which Dr. Bernays found to be due to biliary constituents. He suggested that the presence of such pigment proved that the growth had originated in the hepatic cells, and might thus serve to distinguish it from growths originating in bile-ducts or mucous follicles.—Mr. PAUL agreed with this suggestion.

Mr. BILTON POLLARD showed a specimen of Hypertrophied Callus of Tibia and Fibula, removed by amputation from a female child aged five years, who was a patient in University College Hospital, under the care of Mr. Marcus Beck. The child had a fall which injured the affected leg at the age of one year. A year and a half later a painless swelling was noticed at the middle of the leg. The swelling gradually increased. On admission the central portion of the tibia was found to be much enlarged, and another swelling was detected at the junction of the lower and middle thirds of the fibula. The leg was amputated in the belief that the disease was malignant. The tibia was found to be the seat of a new growth of fusiform shape, and was bent above and below the tumour. A layer of compact bone was present at the concavity of each bend, apparently thrown out as supporting structures. The tumour of the fibula was independent of that on the tibia. The knife could easily cut sections of the tumours. The new growth consisted throughout of well-formed bone, which was undergoing a process of remodelling just as occurs in the normal growth of bone. The soft tissues of the growth were made up mainly of spindle-shaped cells with a few round and stellate cells. The growth was indistinguishably blended with the osseous tissue of the shaft of the affected bones. The duration of the swelling (two years and a half); the uniform consistence of the growth; the existence of two separate growths; the history of an injury, which was possibly a fracture—all pointed to the view that the growth was hypertrophied callus. Mr. Pollard had met with one somewhat similar instance on the bones of the forearm. The views that the tumour was of a sarcomatous or a simple inflammatory nature were discussed, but rejected as not harmonising with the ascertained facts, though it was allowed that the difference between a hypertrophy of callus and some forms of sarcoma might be a mere question of degree.—Mr. S. G. SHATTOCK asked whether the growth might have been syphilitic.—Mr. H. T. BUTLIN said the specimen was a very remarkable one. He regarded it as a sarcoma, but the fact that both bones were affected and that there was bending of the bones rather went against this view. Still, he thought that it was a sarcoma.—Mr. BILTON POLLARD said there was no history, and no evidence of syphilis.

Dr. W. B. HADDEN showed a specimen from a case of Chronic Cerebro-spinal Meningitis, taken from a boy aged eleven, who died in St. Thomas's Hospital under the care of Mr. Mason. There was a history of phthisis in the mother's family. Fifteen months before admission the boy was hit on the head with a piece of iron. Next day he complained of his head and began to vomit, which continued till death. A year before death the symptoms suggested to Mr. Willmer Phillips cerebellar tumour. Two or three months later the legs became weak, and he lost control over the bladder. He had fits of an epileptic character. The sight had been failing for about two months. On admission, he complained of pain in the head, was drowsy and nearly, if not quite, blind. The pupils were equal, dilated, and sluggish; the eyeballs continually oscillating. There was occasional sickness whilst he was under observation, but no fits. He passed his evacuations into the bed. At the necropsy there were no signs of injury to the bone, and the dura mater was healthy. Both the upper and under surfaces of the cerebellum were covered with an opaque white material one to four millimetres thick. It was beneath the arachnoid, which was for the most part free, but here and there adherent. The tips of the temporo-sphenoidal lobes were similarly affected, but to a less degree. There was much thickening and opacity about the optic tracts and chiasma, and the edges of the fissures of Sylvius were adherent. There was no tumour, and no naked-eye appearances of miliary tubercles. There was a thick white layer beneath the arachnoid over the posterior surface of the entire lumbar and lower dorsal regions of the cord. The arachnoid was adherent to it over the greater part, but here and there it was free, the surface presenting numerous small bleb-like elevations. There was a caseous nodule at the apex of the left lung and a few miliary tubercles in the kidneys and liver. On microscopical examination the thickening over the cerebellum and cord were found to be really organised lymph, but no tubercles were seen. The symptoms followed so directly on the head injury that it is very probable there was a relation of cause and effect. Possibly the injury set up a meningitis of tubercular nature running a chronic course. The limitation of the disease to the base favours this idea. But, on the other hand, the spinal cord was affected—an unusual accompaniment of tubercular meningitis. Pathologically, the disease was a chronic inflammation of the pia mater, but the relation of this to the head injury and to the tubercular diathesis is less clear.—Dr. ANGEL MONEY had seen a case of chronic purulent cerebro-spinal meningitis in a girl aged three years. There was a history of a fall down a flight of stairs, and the symptoms began soon after this fall. Headache, vomiting, and fits of screaming were the early symptoms. The disease lasted twenty-six weeks. Fever, vomiting, universal rigidity, and unconsciousness were the main clinical symptoms. At the autopsy the body weighed only 17 lb. There was much thickening of the meninges, both of the base of the brain and of the spinal cord; a collection of pus existed beneath the cerebellum; extreme internal hydrocephalus was present, and the fluid was purulent in the lateral ventricles, where the ependyma was much congested and coated with velvety lymph. There was no disease of the internal ear. In another case, marked by the same clinical symptoms, extensive syphilitic arteritis of the cerebral vessels was present, with atrophy and sclerosis of the brain and spinal cord, but without meningitis.—Dr. CHARLTON BASTIAN referred to a case in which there was remarkable rigidity. The child had sustained a severe fall about eight or nine months before the disease began. At the autopsy a white sarcomatous growth was found at the base of the brain and extending down the spinal cord, which was thereby ensheathed in the new growth, which was a quarter or a third of an inch in thickness. The disease appeared to have developed as a direct consequence of the fall.—Dr. GOODHART spoke of cases of chronic meningitis in children, and referred to the thickened velvety lymph which adhered to the meninges, and to the presence of pus in the ventricles. Although in a case he specially referred to there was no perforation of the membranæ tympani, still pus was present in the middle ear. In his experience it was not rare for tubercular disease to extend to the spinal membranes.—Dr. NORMAN MOORE spoke of a class of cases which had been described by Drs. Gee and Barlow under the name of cervical opisthotonos; these cases were really examples of cerebro-spinal meningitis, and in many there was a definite history of an injury which seemed to play a causative part in the occurrence of the disease.—Dr. WILKS said it was difficult to diagnose such cases from the clinical symptoms; for although a distinct physiological condition probably underlay them all, yet the pathological lesion was not always the same. The commonest cause of rigidity in his experience was meningitis, and even in Pott's disease accompanied by rigidity there was frequently nothing but a localised meningitis, without sclerosis of the cord. It was very difficult to distinguish between a new growth and an inflammatory product, and he instanced the disease known as cervical pachymeningitis, in which, although there were the causes of inflammation, the material thrown out might not unreasonably be regarded as of the nature of a tumour.

Mr. SHATTOCK showed two specimens of Actinomycosis of the Liver, which he had found in the museum of St. Thomas's Hospital. There was no doubt about the presence of the fungus, and sections were placed under the microscope. With one of the specimens there was a history. The specimen came from a girl aged fifteen, who was believed to have died from "scrofulous" disease, which affected chiefly the ovaries and Fallopian tubes. [In our leading article last week by an oversight we forgot to allude to a case of actinomycosis published in THE LANCET, vol. i., 1884, p. 107, by Dr. Knight Treves. We have to thank Dr. Neale, the author of the "Medical Digest," for correcting this oversight.]

Mr. BLAND SUTTON read a paper on Typhoid Fever in Monkeys. Dr. Budd and Professor Axe considered that the typhoid fever, purple or red-soldier, was the same disease as typhoid fever in man, but Dr. Klein had found that there was nothing in common with the disease in man. Mr. Sutton had reported some cases of typhoid fever which occurred in lemurs living in the monkey-house of the Zoological Gardens. Payer stated that in 1839 M. Serres reported an outbreak of typhoid fever among the monkeys in the menagerie attached to the Museum of Natural History, Paris. The symptoms were diarrhœa, increased frequency of the pulse, and fever, ending almost always in death. In January of the present year there arrived at the Zoological Gardens six Canadian beavers apparently in the best of health. In the course of four or five weeks after their arrival four out of the six animals died, and the remaining two were sent away and recovered. The younger ones were the first to succumb, but in all ulcerated Peyer's patches were found both in the agminate and solitary forms; the ulcers were typical of the disease. In the young specimens the various stages could be seen from the normal Peyerian patches through the infiltration and sloughing stages, with the bile-stained débris still hanging to some of them. Small whitish specks could be seen in the liver of two beavers; these were due to disintegration of minute areas of the hepatic tissue. Despite the negative results of inoculation, Mr. Sutton thought his cases proved that typhoid fever could occur in monkeys.

The following card specimens were exhibited:—

Dr. Charlewood Turner: Posterior Sclerosis of the Cord.

Dr. Goodhart: A case of Cirrhosis simulating Cancer of the Liver.

Mr. Battle, for Mr. Croft: (1) Primary Sarcoma of the Kidney; (2) Fistula between small Intestine and Bladder.

Mr. Doran: Pedunculated Fibroma on the Outer Wall of an Ovarian Cyst.

Mr. D'Arcy Power: Three specimens of an Encysted Hernia.

Dr. Burnet: Much Contracted Right Lung (recent specimen).

Dr. Charlewood Turner: Typhoid Infiltration of Ileum (recent).

Dr. Percy Kidd: (1) Tubercular Ulceration of Tongue; (2) for Mr. H. H. Taylor, another specimen; (3) Small Fibroma of Cæcum.

Mr. Churchill: (1) Congenital Papilloma of Chin, Buccal Mucous Membrane, and Middle Line of Neck; (2) Acute Ostitis of Tarsus following Excision.

Dr. Hale White: (1) Rupture of Aorta; (2) Fracture of Sternum with Disatriculation of Costal Cartilages.

MEDICAL SOCIETY OF LONDON.

Syphilitic Disease of the Brain.—Treatment of Cancer of the Cervix Uteri.

AN ordinary meeting of this Society was held on the 27th ult., Dr. W. Miller Ord, F.R.C.P., President, in the chair.

Dr. ALTHAUS read a paper on a case of Syphilis of the Brain. The patient was a clerk, aged twenty-eight, who had had a hard chancre about four years ago, and after having been apparently well for three years was affected with ophthalmoplegia of the left eye, and six months afterwards with hemiplegia of the right side. When admitted into the hospital he showed almost complete paralysis of all the muscles supplied by the third, fourth, and sixth nerves, including the iris and the ciliary muscle. The intellect was impaired; and there was incomplete hemiplegia of the right side. Dr. Althaus argued that this group of symptoms could only be due to syphilis. With regard to the hemiplegia, he laid chief stress on the age of the patient, the fact that there had been no apoplexy when the stroke occurred, and that the paralysis had been incomplete from the beginning. Ordinary hemiplegia did not occur in the prime of life, except where there was heart disease, or diabetes, or tabes spinalis, or alcoholism; it was almost invariably ushered in by apoplexy, and was complete at least for the first few days or weeks; nor was it accompanied with palsies of the ocular muscles. A peculiar symptom in the present case was an enormous exaggeration of the tendon reflexes in the palsied limbs, out of proportion to the degree of paralysis as well as of muscular rigidity which were present; and Dr. Althaus was inclined to consider this as a pathognomonic symptom by which syphilitic hemiplegia was distinguished from ordinary hemiplegia. With regard to the nature and seat of the pathological lesion, he argued that there was a gumma at the base of the brain, near the inner surface of the crus cerebri, close to the pons Varolii, which, by compression had caused paralysis of the three cranial nerves mentioned, and by further extension later on to the crus itself, which contains the crossed pyramidal strands, caused softening of these parts and thereby hemiplegia. He concluded with some remarks about the prognosis of syphilitic lesions of the brain generally, stating that specific treatment was only successful in primary and truly specific lesions; but where a gumma had already caused wasting of the cranial nerves and softening of cerebral tissue—that is, secondary and non-specific lesions—no amount of mercury and iodide of potassium could effect a cure. From this he drew the conclusion that an energetic specific treatment should be adopted as soon as the slightest symptom of syphilitic brain disease was observed, so as to disperse the primary specific lesions and prevent the occurrence of incurable secondary lesions.—Dr. ORD referred to the difficulties of localisation of the lesion causing the various symptoms in this case. With regard to the symptom specially commented on by Dr. Althaus—exaggeration of the deep reflexes—he should very much like to hear the value of this symptom discussed.—Dr. DRYSDALE said it was since 1858 that our knowledge of cerebral and spinal syphilis had been gained. He referred to cases of syphilitic lesions of the brain which had come under his notice.—Dr. K. FOWLER was interested in the exaggeration of the deep reflexes; he had observed this symptom in neurasthenia from almost any cause. The occurrence of hemiplegia at the period of life mentioned in the paper was not, in his opinion, conclusive of syphilis.—Dr. CLARK asked whether headache had been present in this case. He believed that muscular tone exercised an influence on the deep reflexes. He had seen a case of hemiplegia in the course of renal disease in a young girl.—Dr. ALTHAUS said that in aphasia due to syphilitic lesion the prognosis was gloomy. The deep reflexes were not exaggerated in the side which was not paralysed. Cephalalgia was not present in this case.

Dr. HERBERT SNOW read a paper on the Free Use of Caustic Potash in the Treatment of Cancer of the Cervix Uteri. He reviewed the statistics of extirpation of the uterus, and showed the severe mortality which followed the abdominal or the vaginal operation. In many cases the écraseur was unable to remove the whole of the disease of the cervix uteri. The actual cautery had too superficial an action to be of any great service. Chloride of zinc caused much pain and distress, which lasted a long period. These objections did not hold with regard to potassa fusa. Half an hour or an hour was recommended to be spent in the employment of successive sticks of potassa fusa, for the treatment must be thoroughly carried out. None of the cases suffered from peritonitis; and unless the patient get up too soon after the operation, nothing distressing need be feared. All the cases were greatly benefited, and no alarming symptoms were encountered. Fixation of the uterus and infiltration of the vaginal wall were regarded as prohibiting the employment of this method of treatment. It was only by degrees that he had ventured to apply the caustic so freely as he now advocated. He illustrated the paper by narrating several cases in which the treatment had been adopted. The object of the paper was to show that potassa fusa could do all that the vaginal cutting operation could perform without running the risk of the severe operation.—Dr. EDIS said that he had performed

Marion Sims's operation of the removal of a conical portion of the cervix with much benefit. He did not believe that potassa fusa could exercise any curative influence on malignant disease of the cervix.—Dr. C. H. ROUTH was struck with the circumstance that in the cases narrated the patients died in from four to nine months. He believed that cancer, if left alone, would last longer than if operated on. Potassa fusa in his hands had proved harmful; bromine was the most effectual. External vegetations were best healed by tincture of gall-nuts or hazeline.—Dr. ROGERS said that potassa fusa had been used for all sorts of uterine ulceration; in his hands it had set up so much irritation of the bladder that he was compelled to give up the use of it.—Dr. HEYWOOD SMITH said that potassa fusa was of value in areolar hyperplasia of the cervix uteri. He had observed that Chian turpentine changed the character of the secretions, and in other ways proved beneficial.—Dr. H. SNOW briefly replied.

Mr. SPENCER WATSON showed a case of Exophthalmic Goitre in a female, with slowness of speech and dulness of intellect, in which tonic treatment had been beneficial.—Dr. ORD said that in some of the cases of myxœdema which he had seen he had observed in the early stage symptoms which usually accompanied exophthalmic goitre.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.

AT the meeting on April 17th, Dr. J. ORME DUDFIELD, President, in the chair,

Dr. THOMAS STEVENSON read a paper on Sewage Disposal. The author commenced his paper by expressing regret that the possibility of dealing with excreta directly on the soil with Arcadian-like simplicity was confined to the very few. He said that the processes, inorganic and organic, by which effete matters are got rid of by the soil can be but feebly imitated by man; yet it is by the study of these processes and their more exact imitation that we must look for a more satisfactory disposal of sewage in the future. The author traced the different methods of excrement-disposal, from the primitive privy to the introduction of the watercloset in 1810, since which time the latter has become the common, although by no means universal, method of removal, notable exceptions being found even in large towns such as Leeds, Bradford, and Birmingham, in which there were many houses without waterclosets, while in Stafford a watercloset was phenomenal. At the beginning of the present century, and for long afterwards, cesspools were universal in London, and although sewers existed it was penal to use them for sewage. At this time the river water at London-bridge was drinkable, and many persons still living remember the waterworks opposite Fishmongers' Hall, which were used for the supply of the city. The use of waterclosets increased the volume of water in the cesspools and necessitated an overflow to the sewers, so that in a few years the state of the law underwent a complete reversal; and now, instead of the discharge of sewage into sewers being a punishable offence, it is penal not to drain into a sewer if one be accessible. The author said that the composition of sewage varied much less than might be expected, and that the difference was one of degree rather than of kind; that there was little difference between the sewage of a waterclosseted town and a non-closeted town. Taking the average of the community, the dry solid excrement is 1 oz. per head per day, which is distributed through 300 lb. of water—say, 15 grs. per gallon; and as for the urine, whilst the major portion, of that of adult males, never finds its way direct into the sewers, of the 2½ oz. solids distributed through 300 lb. of water, 1¼ oz. only is organic, one-half of which, urea, is speedily converted into innocent carbonate of ammonia. Although the solid excrement forms the most important polluting agent of sewage, it is by no means the greatest in aggregate amount, and, indeed, forms only a small fraction of the total polluting material, which comes from the innumerable articles of domestic economy. He thought that in no British town could the difficulties attending sewage disposal be greater than those which presented themselves in London—a site much of which is below river level, an immense area, a city remote from the sea, with no available area close to its boundaries, and a situation near the upper end of the tidal reaches. He considered that much credit was due to those who had hitherto dealt with the disposal of the sewage of London, and great blame would rest on the responsible authorities if they did not at once manfully set themselves to do all that can be done to mitigate and abate the nuisance of the filthy condition of the Thames. When fresh and freely exposed to air, as in sewers only partially filled, sewage has little odour, and can scarcely be considered as offensive; but once let it accumulate in large quantities and come to comparative rest, putrefaction sets in, and it becomes vilely odorous—a seething mass full of those minute organisms which live, and grow, and multiply in an airless, deoxygenated medium. To prevent this, sewage must be dealt with in one of three ways: (1) The sewage may be at once thrown into a large volume of water, a river, or the sea, where it can be carried away by currents, diluted by diffusion, and oxygenated by the dissolved oxygen, without appreciable nuisance. (2) It may be applied directly to land, if sufficient area be obtained to dispose of the sewage without offence. (3) It may be treated with chemical agents, such as either destroy the organic matter, or those that destroy the agents of putrefaction, the lower organisms. The author briefly discussed the first method, but only to condemn it, as causing nuisance and danger to health. In speaking of the second method, utilisation on land, he said that while in principle this was no doubt the right one, the fertility of the land being dependent on the restoration to it of the mineral constituents of the food grown upon it, the method from a pecuniary point of view could rarely be profitable, and commonly entailed loss. He estimated the value of a ton of London sewage (the quantity yielded per head of the population per week) if its manurial constituents were in a solid and portable form, at twopence; but when sewage had to be utilised on land in a highly diluted form, and in all weathers, the actual value was found to be only a halfpenny, and this leaves no margin for cost of transport, so that when the sewage had to be pumped the cost of pumping exceeded the value of the article pumped. There is, however, no agent which so efficiently deodorises sewage as the soil, which acts not only as a checker of putrefaction but also absorbs the gases of sewage, and, further, is the nidus of the wellnigh demonstrated nitrifying agent—i.e., the bacterial organism—by which ammonia and nitrogenous organic matter, immediately or through the intermediate stage of ammonia, are converted into nitrates. The author referred to the researches of Schlœsing and Müntz and of Warington to show that it is probable that such a bacterium does exist, and plays some such part in nitrification, as yeast in a saccharine infusion does in setting up alcoholic fermentation. A point of great practical importance referred to in this connexion was that the nitrifying action is limited to the superficial layers of the soil, decreasing as we descend, until, at 18 in. below the surface, the action entirely ceases. This points to the possibility of economy in the cost of carrying out the process of intermittent downward filtration, as, by keeping the superficial layers of the soil in good condition for nitrification, the great expense of deep excavation and preparation of the soil may be saved; while broad irrigation, where a sufficiency of land is available, offers a satisfactory mode of sewage disposal, and is one which holds out more likelihood of realising some portion of the value of sewage than any other. It is seldom, however, for obvious reasons, applicable to the sewage of large towns. There is an erroneous notion prevalent that sewage can be effectually treated by means of chemical substances alone. Any chemical which will effectually destroy the spores of bacteria, or deprive them of potential life, will certainly render the sewage unfit to be disposed of anywhere, for by such addition it becomes a poisonous fluid. Chemical treatment directed to the end of clarifying sewage, but not of rendering it non-putrescent, is a great advantage, for the suspended solids of sewage are the chief source of difficulty in treating sewage. As to the agents to be used for clarification, the author said if the sewage is to be used for broad irrigation, simple straining will suffice; when land filtration is the plan to be adopted, something more is advisable; and when the effluent is to be turned into a stream without any other treatment than a chemical one, efficient clarification is indispensable—such a clarification as leaves less than a grain of suspended solids in each gallon of effluent, and even with this degree of efficiency no effluent ought to be turned into a stream unless the volume of running water is enormous in proportion to the sewage it is to receive. The chemicals to be used for precipitating sewage may be varied. Of these lime has been largely used both on account of its being reasonably efficient and because of its cheapness; it should be dissolved previous to its use. Fifteen grains of lime to each gallon of sewage is an ordinary proper proportion, but it is better to accurately adjust the quantity to the degree of hardness of the water of the district—i.e., one grain of lime per gallon of sewage for each degree of hardness of the water-supply. An excess of lime is hurtful, for subsequent putrefaction is apt to occur; it may kill fish, and according to Warington may entirely prevent nitrification. The addition of a little sulphate of aluminia is beneficial, as it carries down a flocculent precipitate, entangling the lower organisms and their spores, difficult to remove by lime alone. Moreover the use of alum neutralises any excess of lime which might occur in the effluent. Sulphate of iron is another salt which may be usefully employed, but it is questionable whether this is a useful addition when the sewage is subsequently applied to the land. The author concluded his paper with the following remarks: "So far as I can foresee, the sewage disposal of the future for our large towns will be one where application to land supplements a preliminary precipitation process; and the land treatment will be a filtration process by which the area of land requisite will be limited. Such a combined process fulfils all the requisites of good purification, and is based upon these fundamental data. The sewage must be dealt with speedily before putrefaction has begun; and the agents of putrefaction, the bacteria, must be removed by clarification, which secures the removal of most of the bacterial organisms. The precipitated and clarified sewage is then to be brought as speedily as possible under oxidising influence, and nothing more effectively does this than the nitrifying organism. Putrefaction and nitrification are antagonistic processes; and so long as nitrification is going on, putrefaction is, I believe, impossible. Sewage, when clarified by any simple process—and the simpler the better—and then passed through land is odourless, and this cannot, strictly speaking, be said of sewage simply precipitated; and is also insusceptible of putrefaction. Anything that falls short of the result obtained by the combined process I have referred to cannot be considered a very desirable mode of sewage disposal, albeit a less efficient process may under certain circumstances be permissible.—In the discussion which followed Drs. Drysdale, Edmunds, Bernays, C. E. Saunders, and Messrs. Rogers, Field, Corner, Edmunds, Jacob, and Winter Blyth took part.

ACADEMY OF MEDICINE IN IRELAND.

A MEETING of the Surgical Section was held on January 23rd, the President, Dr. E. H. Bennett, in the chair.

Professor STOKES, in a paper on Astragaloid Osteotomy in the Treatment of Flat-foot, commenced by drawing attention to the usually accepted theories as regards the etiology of flat-foot—viz., ligamentous relaxation and a paralytic condition of certain muscles connected with the ankle and foot. He adduced various arguments to disprove these views. Attention was drawn to Professor Ogston's researches in this direction, and an account given of the operation he has devised for the cure of the deformity in question; and objections to it were taken, based on the operation being complicated and difficult, and followed necessarily by an obliteration of the medio-tarsal joint. Mr. Stokes believed that the defect causing flat-foot is due, primarily, to alteration in the tarsal bones, notably the astragalus, which change in it may be either congenital or the result of disease—probably rickets,—and that this stretched rather than relaxed condition of the ligaments is a secondary rather than a primary change. In illustration of this view, he exhibited a specimen of the deformity taken from the museum of Trinity College, and for which he was indebted to Professor Bennett. Having regard to the fact that in the irreducible cases of flat-foot osseous deformation is the chief factor, Professor Stokes believed that the rational treatment for such cases should be to deal exclusively with the deformed astragalus, and to do so without necessarily obliterating Chopart's joint. This he did in the case of a youth aged fourteen, and with complete success. The parts to be operated on were rendered perfectly aseptic, and an incision an inch and a half in length along the inner edge of the foot made, the centre of which incision was the prominence caused by the head of the astragalus. At the centre of the incision another was made at right angles to it, a little behind the situation of Chopart's joint, and the two triangular flaps of skin dissected back for about half an inch. A wedge-shaped piece of bone from the enlarged head and neck of the astragalus was then removed with an osteotome, and it was then found that by adducting and supinating the foot the arch was perfectly restored. The wound during its union was aseptic throughout, and the patient afebrile. The method Professor Stokes adopted for keeping the foot in a position of adduction was by the application of a Dupuytren's splint applied as in a case of Pott's fracture of the fibula. The result of the operation was most satisfactory, and casts of the foot, taken before and after the operation, were exhibited.

Mr. KENDAL FRANKS gave the details of a case in which he had performed Ogston's operation for Flat-foot on Oct. 16th last. The paper was illustrated by two impressions, taken in charcoal, of the foot, before and after operation. The first impression showed the foot resting on the length and breadth of the sole; a remarkable prominence on the inside, corresponding to the astragalo-scaphoid articulation, showed where this joint rested on the ground. The second impression showed that the arch of the foot had been restored, so that when the sole of the patient's foot was blackened with charcoal, and she was placed standing on a moistened sheet of paper, the paper received an impression only of the heel, the outer side, and the anterior portion of the foot. The operation wound was perfectly healed on the sixth day, and the highest temperature recorded was 99·2°.

The adjourned discussion on the Operation for Flat-foot took place on February 20th, when Mr. CORLEY said he was satisfied that the disease commences in the ligamentous and tendinous structures; that if the bones eventually exhibit deformity, it is from growth in some direction from which natural pressure has been removed.—Dr. SWAN said that he considered most of Mr. Stokes's statements were misleading, and some of them appeared to him to be erroneous. Mr. Stokes had stated that the deformity of flat-foot was due to a mal-development of the bony structures of the tarsus, and, without considering the degree or state of the affection, he condemned all methods of treatment as useless except the operations, in which doubtless he included Ogston's as well as his own. He had himself seen thirty-four cases in minor or greater degree, and had observed it under three distinct phases. It commenced with the sliding of the astragalus inward and the upper surface of the os calcis relaxing, the ligament connecting the outside of the astragalus with the calcis. This produced, as Mr. Corley observed, an obliquity at the ankle-joint. The axis of the weight was thrown on its side. Next, there was a relaxation of the plantar ligament. Looking at the anatomy of the parts, the outer division of the plantar ligament fills up the sinus pedis, which prevents displacement of the head of the astragalus, but the interval between the os calcis and the scaphoid is lengthened. Mr. Stokes stated he had observed this in persons of robust health; that was not, however, his experience. In the second stage it was accompanied by a fusion of the muscular structures, which were chiefly of the anterior portion of the foot. The adductor pollicis and the muscles on the inner portion of the foot were atrophied, and the bones could be distinctly felt through those muscles. The tibialis posticus was involved. The third and last stage was one for which no doubt an operation of some kind would be desirable—namely, when the sole of the foot was altogether flattened and the head of the astragalus came upon the ground, and he believed also occasionally the projecting point of the scaphoid. With regard to treatment, it would be too much to admit that all those cases which in the first and second stages did not present serious inconvenience were suitable for operation. The true clue to the treatment of the affection in the earlier stages was to approximate the extremities of the tendinous structures binding the bones together. If bony enlargement or mal-development caused the affection, how was it that in all those cases the foot could be reduced to its pristine symmetry by manipulation? That could not be done in the case of bony deformity. There was a distortion and rotation inwards of the astralagus, as Mr. Corley observed, but there was no enlargement until the last stage, when osteitis was the cause of the enlargement of the bone. He had seen spontaneous cures of the affection. In the case of a patient condemned to long-continued rest the foot regained its natural shape. Ogston's seemed to be the natural method to restore the arch of the foot, allowing the gradual restoration of the ligamentous structures, which appeared to be untouched in the operation.—The President (Dr. Bennett) suggested the excision of a wedge-shaped piece from the side of the astralagus without opening the ankle-joint. The first and second stages of the affection were most painful.—Mr. Stokes briefly replied.

Mr. Arthur Benson read a paper describing a case of a gentleman, aged thirty-three years, on whom he had successfully removed an Ivory Exostosis from the Auditory Meatus. He had first used electrolysis to destroy the vitality of the periosteum, and produced thereby a superficial necrosis of the apex of the bony growth, which separated after six weeks. Five months later, the effect of the electrolysis not being sufficient, he employed the dental engine, and, with the assistance of Mr. Arthur Baker, removed the remainder of the exostosis. The patient was seated in a dental chair, and whilst under ether a deep vertical slot was cut in the base of the tumour with the dental saw. Into this a small chisel was inserted, and a slight blow from a hammer served to separate the remainder of the base, and the growth was removed. Recovery was perfect, and when last seen (January, 1885, a year after the operation) there was no sign of a return in the position of the growth, and hearing was perfect. The operation was, contrary to the recommendation of almost all authorities, undertaken before the canal was completely closed by the growth. Mr. Benson advocated the early operation, in such cases, as probably easier to perform, less dangerous to the patient, and, on the whole, more in accordance with the progress of surgery, than the plan of waiting until "total deafness had occurred in both ears," as most authors recommended. The mode of operating adopted in the case seemed to offer excellent facilities for the earlier removal of such growths, without the dangers attendant on the use of the drill or gouge. The cause of the growth was supposed to be bathing in a river, which produced pain in the ears.—Mr. Story gave a brief description of a case of aural exostosis, in which he had some three years ago obtained excellent results by the application of Vienna paste after drilling and electrolysis had failed. The membrane of the drum was perforated during the treatment, but it rapidly healed up, and for the past three years the patient has had no relapse. Exostoses near the external orifice were easy to deal with either by the hammer and chisel or by the dental saw, which seemed an admirable proposal; but growths deep down in the meatus taxed the utmost resources of the most skilful and experienced operators, and should not be touched except in the case of the most urgent necessity.—Mr. Swanzy could hardly imagine a better mode of operating than the one which had been adopted; but he would not have operated in the case in question, deafness being extremely rare as the result of exostosis in the external meatus. Such growths were among the common diseases of the ear, but absolute or serious deafness was uncommon. He would wait until the growth threatened serious and permanent deafness.—Mr. Benson, replying, said the exostosis was a distinct enlargement of the true bone. The whole question was, how much danger there was in the operation. Most patients would prefer one operation than to go once a month to a doctor to have deafness removed.

Mr. Story read a paper entitled Operations for Trichiasis and Entropium of the Upper Eyelid, in which, after criticising the operation proposed by Dianoux, which Mr. Story was *the first* to introduce to the notice of oculists in these islands, he proceeded to describe the manner in which he now operates both for entropium and trichiasis. The method is, with some trifling modifications, the same as that described by Dr. Van Millingen of Constantinople—a transplantation of the ciliary border, without removal of any palbebral skin, the requisite elevation of the cilia being effected, after the completion of Flarer's inter-marginal incision, by inserting a strip of mucous membrane, taken from the patient's mouth, into the space left exposed by Flarer's cut.

After a brief discussion, in which Mr. Swanzy, Mr. Stokes, and Mr. Benson took part, the Section adjourned.

Disused Burial-grounds.—At a sitting of the Consistory Court of London, held on Monday in St. Paul's Cathedral, before the Chancellor, Dr. J. H. Tristram, Q.C., faculties were granted for the use of the burial-grounds of Holy Trinity Church, Gray's-inn-road, and of St. John's, Clerkenwell, as recreation-grounds.

Reviews and Notices of Books.

Cocaine, and its Use in Ophthalmic and General Surgery. By H. Knapp, M.D., Professor of Ophthalmology in the Medical Department of the City of New York. With Supplementary Contributions by Drs. F. H. Bosworth, R. J. Hall, E. L. Keyes, H. Knapp, and Wm. M. Polk. New York and London: G. P. Putnam's Sons (the Knickerbocker Press). 1885.

The New Local Anæsthetic, Hydrochlorate of Cocaine. By Laurence Turnbull, M.D., Ph.G., Aural Surgeon to Jefferson Medical College Hospital, Philadelphia. Philadelphia: P. Blakiston, Son, and Co. 1885.

It is with much pleasure that we record the appearance of these new works on the subject of cocaine. Dr. Knapp points out that no modern remedy has been received by the profession with such general enthusiasm, none has become so rapidly popular, and few have been found to cover so extensive a field of useful application. He has collected in a convenient form almost all that has been written on the subject. He commences with a translation of Dr. Karl Köller's classical paper on the Use of Cocaine to anæsthetise the Eye, and shows that at least a fortnight before the appearance of this contribution in the *Wiener Med. Wochensch.* of Oct. 25th and Nov. 1st, American physicians were well acquainted with the substance of it. Muriate of cocaine was at that time procurable in New York, and they without a moment's delay organised a systematic research into the properties of the new anæsthetic, and managed to find out for themselves pretty well all that was known about it long before Dr. Köller's or any other European publication reached them. The first notice of the new remedy which appeared in any American paper was written by Dr. H. D. Noyes of New York, then travelling in Europe. The first original communications on the subject published in America appeared on October 18th, and were by Dr. C. R. Agnew, Dr. W. O. Moore, and Dr. J. L. Minor. The *New York Medical Record* of October 25th (issued on the 24th) contained elaborate papers by Dr. H. Knapp and Dr. D. B. St. John Roosa. The *New York Medical Journal* of the same date also contained records of cases treated by Dr. W. F. Mittendorf, Dr. E. Gruning, and Dr. D. C. Cocks. Since then hardly a week has passed without the appearance of a dozen or more papers on the subject, the results of which have been recorded and analysed by Dr. Knapp, who justly remarks that they afford a striking illustration of the enthusiasm, energy, and quickness with which the American mind seizes upon everything that is of practical importance. It must be admitted that the English reports were at first very guarded, and that some weeks elapsed before it was fully realised that we were in possession of a new and valuable local anæsthetic. "It is characteristic of conservative England," says Dr. Knapp, "that medical men were waked up to the remarkable advantages of a new remedy six weeks later than their American brethren, whereas with an equal spirit of receptiveness and progressiveness they ought to have been two weeks before them." In reply to this charge we have little or nothing to say; we simply plead guilty. At the same time it is only fair to point out that in some of the London hospitals the restrictions as to the use of new remedies—"trying experiments" it is usually called by committees of management—are so oppressive that the medical officers are precluded from doing their best for the patients under their care. In addition to Dr. Knapp's contributions, the present volume contains articles by Professor Bosworth on Cocaine in the Upper Air Passages, by Dr. R. J. Hall on Cocaine in General Surgery, by Professor Keyes on its use in Genito-urinary Affections, and by Dr. Polk on its employment in Gynæcology and Obstetrics. Dr F. P. Kinnicutt of New York, referring to its value in the treatment of neuralgia, says:—"I have used cocaine in a number of cases of facial neuralgia with very satisfactory results. My experience coincides with Dr. Murrell's in regard to the necessary strength of solutions for external application in this affection—a 10 or 20 per cent. solution is required. I have employed oleic acid as a solvent rather than the oil of cloves recommended by Dr. Murrell. I rub in with the finger eight or ten minims of the oleate along the course of the painful nerve, with the effect of affording speedy and marked relief." An interesting case is recorded of spasmodic asthma relieved by the application of cocaine to the nasal cavities. Dr. Knapp's book is in fact full of interesting cases, and we cordially recommend it to the attention of our readers. It reflects great credit on the author.

Dr. Turnbull's work covers much the same ground, but is less comprehensive. He refers at some length to the value of oleate of cocaine in dental affections, and calls attention to the fact that the preparations in ordinary use are not nearly strong enough. Disagreeable symptoms have in some instances been recorded, but they are of little importance, and for all practical purposes cocaine is perfectly safe. Dr. Turnbull thinks that for hypodermic injection or internal use the dose should not exceed a third of a grain, or at most half a grain, but English observers have recorded the administration of larger quantities without bad effect. Dr. Turnbull's book contains much that is of interest.

The Colloquial Linguistic Faculty and its Physiological Groundwork. By W. H. Walshe, M.D. London: John Bale and Son. 1885.

The profession and the public are alike to be congratulated that Dr. Walshe finds time in the intervals of professional work to take up and analyse such a question as that which is treated in the little book which is the subject of this notice. A year or two since Dr. Walshe published a work on the criticism of dramatic singing, remarkable alike for its fresh originality, its deep learning, and its knowledge of the art which he so well expounded. The present work, though smaller, has the same characteristics as the former, to which it seems to us to form a fitting sequel, and we can only hope that the two may eventually be published in one volume. As a teacher of medicine, Dr. Walshe was noted for the minute and painstaking accuracy of his investigations into the cases under his care, for a marvellous acuteness of hearing when engaged in auscultation, for his lucid and elegant style of exposition, and for his flashes of incisive humour, which served to fix the attention even of the greatest dullards. Those who have benefited by the teaching of the physician will be glad to spend an hour or so with their old master, and to recognise the same power and qualities brought to bear upon a subject of the very highest importance; for is it not true, as was said we fancy by Lord Chesterfield, that "he who knows two languages is twice a man"?

Dr. Walshe believes that the real colloquial acquisition of any tongue other than the mother tongue is given to very few, and that the faculty of acquisition is extremely rare. He says:—

> "In sober truth, an absolute practical and critical mastery of even the humble number of two or three languages has seemed to me, in my life's journey, a form of accomplishment of singular and in some sense unaccountable rarity. Let me, in justification, instance a pair of languages—those of England and France—countries whose inhabitants are placed in circumstances of locality and of political, commercial, and social relationship (antagonistic though it often be) tending in the strongest manner to familiarise each of the two nationalities with the language of the other. Now, to graduate as a thorough master of both tongues a man of education should be able to read Shakespeare and Corneille, Shelley and Lamartine, Moore and Béranger with a cultured native's keen intellectual and emotional perception of every shade of beauty in their lines; to seize with equal facility the uproarious fun of a burlesque at the 'Gaiety' and the double meaning of a scampish farce at the 'Palais Royal'; to follow with a like ease the eloquent exposition of a Tyndall anent the origin and destiny of man, and a poetic rhapsody at the Sorbonne by Michelet (were he still alive to electrify the historical student) on the ferocities of mediæval barbarism; to lose no single point in a chansonette by Chaumont, or a serio-comic street-arab ballad of Nelly Farren; to hold his own equally well in money disputes with the cabmen and laundresses of Paris and London; to enjoy as thoroughly the humour of *Punch* as the wit of the *Charivari*, and the grave polemics of the *Revue des Deux Mondes* as those of the *Quarterly Review;* to possess the financial vocabulary of the Bourse and of Capel-court; to speak the two tongues with at least a fair share of the intonation, inflection, vocal ring, pronunciation, accent and fluency, distinctive of a native's delivery of each; and, finally, to translate from either language into the other with correct phraseology, word collocation, and idiom, an epigrammatic article on the topics of the day, and a serious disquisition on a problem of art or literature. Now, how many men are likely to be found thus qualified on either side of the Channel? Would Mezzofanti, on these lines, have taken a bachelor's degree in any notable minority of—heaven save the mark!—his forty familiar tongues?"

That persons possessing the colloquial faculty in the degree above sketched, or in anything approaching it, are excessively rare will be at once conceded. The faculty consists, as Dr. Walshe is at great pains to show, in the fortuitous concourse in the same individual of a variety of conditions, physiological and social, and his work goes to prove that the man who has a "genius" for talking foreign tongues is born with it, and that education can add something only to the congenital faculty.

The conditions regulating the colloquial linguistic faculty are, according to Dr. Walshe, (*a*) cerebral (1, formative word-centre; 2, emission word-centre; 3, audition centre; 4, tone centre; 5, motor word-centre; 6, imitative faculty; 7, memory; 8, automatism; 9, unconscious cerebration; 10, anastomotic association); (*b*) muscular; (*c*) sensuous (organs of sight and hearing); (*d*) social (international intercourse, foreign marriage, social status); (*e*) personal, sex, age, temperament, health, heredity; (*f*) national.

Our readers will at once see how unanswerable are many of the arguments foreshadowed in the above tabular statement. But those who wish to be both instructed and amused must read the arguments as put forward by Dr. Walshe, whose book deserves to be widely read, containing as it does much important matter of practical use to many sections of the public, including physiologists, schoolmasters, and ministers of education.

Studies from the Biological Laboratory of the Johns Hopkins University, Baltimore. Edited by Newell Martin and W. K. Brooks. Vol. ii., No. 4.

This number contains—1. Notes on the Development of Panopæus Sayi, by E. A. Birge, with four plates. 2. The Structure and Growth of the Shell of the Oyster, by Henry L. Osborn, with one plate. 3. The Nervous System of Porpita, by H. W. Conn and H. G. Beyer, with one plate. 4. The Presence of Ciliated Epithelium in the Human Kidney, by A. H. Tuttle, with one plate. 5. On the Effects of Variations of Arterial Pressure on the Duration of the Systole and the Diastole of the Heart-beat, by W. H. Howell and J. S. Ely, with one plate. 6. Notes on the Medusæ of Beaufort; Part ii., by W. K. Brooks, Ph.D. 7. The Action of Ethyl Alcohol upon the Dog's Heart, by H. Newell Martin and Lewis T. Stevens. 8. The Direct Influence of Gradual Variations of Temperature upon the Rate of Beat of the Dog's Heart, by H. Newell Martin. Vol. iii., No. 1:—1. H. W. Conn: Significance of the Larval Skin of Decapods, with two plates. 2. By the same author: Life History of Thalassema. 3. Henry

L. Osborn: Of the Gill in some forms of Prosobranchiate Mollusca. Vol. iii., No. 2:—1. W. H. Howell: Notes on the Composition of the Blood and Lymph of the Slider Terrapin. 2. By the same author: The Origin of the Fibrin formed in the Coagulation of the Blood. 3. H. G. Beyer: On the Action of Carbolic Acid, Atropia, and Convallaria on the Heart, with some Observations on the Influence of oxygenated and non-oxygenated Blood, and of Blood in various degrees of Dilution, with a plate. 4. The Action of Intermittent Pressure and of Defibrinated Blood upon the Bloodvessels of the Frog and the Terrapin, by L. T. Stevens and F. S. Lee.

New Inventions.

POCKET CASES FOR HYPODERMIC MEDICATION.

THE new complete pocket case for hypodermic medication brought out by Messrs. Burroughs, Wellcome, and Co. is admirably adapted to the purposes for which it is intended. Its small compass, its compactness, its inexpensiveness, and its completeness render it an invaluable addition to the physician's armamentarium. It contains a hypodermic syringe with two sharp needles, a miniature glass pestle and mortar, and ten small tubes containing the compressed tablets of the various medicaments mostly employed in hypodermic injections. The compressed tablets, of which we have already given our judgment, are easily crushed in the little mortar, and readily dissolve in a few drops of warm water. We can testify to the ease and rapidity with which a hypodermic injection can be prepared from these compressed tablets, which are made up with sulphate of soda. In our experience the use of these tablets has not been followed by any local irritation or unpleasant effects.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE first annual general meeting of this Association was held on Tuesday last, at 4 P.M., at the Westminster Town Hall. The chair was taken by Dr. G. Danford Thomas, the coroner for Central Middlesex. The meeting was very numerously attended.

The CHAIRMAN, in opening the proceedings, endeavoured to show what an important part of the medical profession the Members of the Royal College of Surgeons were; they constituted the rank and file of the profession, and it was to their efforts that we owed whatever of medical reform had been brought about. Though much reform was still needed in the cause of medical education, yet this could not be accomplished without the passage of a Medical Act Amendment Bill through Parliament. Meanwhile it behoved the profession to look at home, and he considered that there was good cause for reform in the Royal College of Surgeons. The Council of the College had almost estranged the Members of the College from their *alma mater*, and he considered that by their recent action the Council had treated the members with marked discourtesy. He intimated that the Association of Members was in communication with the Privy Council, and it was certain that no new Charter would be granted to the Council of the College without the Members of the College having a voice in the matter. The Members of the College should not cease to exert themselves until they had obtained their just electoral rights. Although the projected new Charter sought to effect some reforms in the constitution of the College, yet he ventured to believe that there was need for much greater reform than that sought by the Council. The first object to be attained by this Association was the direct representation of the Members of the College on the Council; other rights would then necessarily follow. At Liverpool, on May 1st, a large number of Members of the College had held a meeting, which pledged itself to support the objects for which the Association of Members had been founded.

Mr. ASHTON ELLIS, one of the hon. secretaries, then read the first annual report of the Association. The report gave an account of the transactions which had taken place during the past year, including the causes which had given rise to the formation of the Society, and the various means which had been adopted to effect the purposes which the Association had at heart.

Dr. W. C. STEELE then read the financial report, which showed that considerable expense had already been incurred.

The CHAIRMAN proposed that the reports of the Secretaries be received and adopted.

The following list of officers for the ensuing year was proposed and accepted:—President: Dr. Robert Collum. Vice-Presidents: Mr. Joseph Smith, Dr. Danford Thomas, Mr. R. Hicks (Ramsgate), Dr. G. H. Batterbury (Wimborne), Deputy Surgeon-General E. McKellar. Hon. Secs. and Treasurers: Dr. Warwick C. Steele, Mr. J. Nield Cook, Mr. W. Ashton Ellis. Central Committee: Dr. T. Stretch Dowse, Mr. Kenneth Cornish, Dr. C. Royston, Mr. G. Brown, Dr. R. Paramore, Mr. M. G. Biggs, Dr. T. Robinson, Mr. J. Brindley James, Dr. J. W. Barron Mason, Mr. T. H. Sawtell, Dr. Joseph Rogers, Mr. F. J. Pearse, Mr. Horace Watts, Mr. W. G. Dickinson, Mr. John C. Smith, Dr. A. W. Orwin, Mr. W. Outhwaite, Mr. Maurice Clifford, Mr. A. H. Robinson.

Dr. COLLUM moved the following resolution:—"That this meeting protests vigorously against the conduct of the Council of the Royal College of Surgeons in refusing all the demands of the Members of the Royal College of Surgeons."

Mr. JOSEPH SMITH seconded the resolution, and referred to the deputation from the Association which the President and Vice-Presidents of the Royal College of Surgeons received in the early part of the year. The result of that deputation consisted in an answer but recently received, in which the Council of the Royal College of Surgeons practically refused to acquiesce in the demands of the Association. He said that it was probable that the Association of Members would go hand in hand with the Association of Fellows. He read extracts from the letter of Mr. Reginald Harrison which appeared in THE LANCET last week.

Mr. JABEZ HOGG spoke on the resolution, which was unanimously carried.

Dr. JOSEPH ROGERS proposed: "That this meeting urges that immediate steps be taken to prevent any alteration of the said Charter until it has received the general sanction of the Members, for which purpose the Privy Council be requested to receive a deputation to explain the views of the Members, supported by a petition to the House of Commons."

Mr. OUTHWAITE seconded the resolution, which was unanimously carried.

Mr. HORACE WATTS proposed the third resolution: "That this meeting considers that no alterations in the Charter of the Royal College of Surgeons should be allowed without provision being made for the due representation of the Members upon the Council."

Mr. H. T. SHAPLEY (Leamington) seconded the resolution, which was also unanimously carried.

Mr. HOPPER said that the feeling of the Members at the meeting at Liverpool coincided with that which existed at the present meeting, and the Liverpool meeting had passed resolutions to the same effect as those now adopted.

Mr. KENNETH CORNISH considered some modification should be introduced in the bye-laws respecting the mode of election of members of the Board of Examiners.

The meeting then agreed that a copy of the resolutions should be forwarded to the Council of the Royal College of Surgeons and to the Secretary of State for the Home Department.

THAMES VALLEY DRAINAGE.—The Acton Local Board has issued a communication to the various local boards of the western and northern districts of the metropolis, asking their co-operation in the carrying out of a combined drainage scheme prepared by Sir Joseph Bazalgette. The salient features, which comply as far as possible with the recommendations of the Royal Commission on Sewage Disposal, are the laying of a main collecting sewer from Chiswick to Acton, Ealing, and through Willesden, and northwards through the parishes of Leyton, Edmonton, Tottenham, and then eastwards to Barking, where the sewage will be treated before it is passed into the River Thames. The liquid sewage, after it has been chemically treated at suitably constructed works, will be filtered through a certain area of land. Some of the boards have refused to entertain the proposal, while others have promised to give it consideration.

THE LANCET.

LONDON: SATURDAY, MAY 9, 1885.

SEVERAL important meetings have taken place during the past two or three weeks in which this subject had an important place, and the progress of the movement has been one steady advance all along the line. On Monday last a conference was held between the members of the Subcommittee for Medicine of the Association for Promoting a Teaching University for London and a numerous body of delegated representatives from the London Medical Schools, and the outline of a plan for the constitution of such a University was submitted for consideration, and met with an almost unanimous reception. It will be composed of Faculties of Medicine, Science, Arts, and Laws; Boards of Studies; and a Governing Body, and to the constitution of a Faculty of Medicine, comprising all the *bonâ-fide* teachers in the medical schools, there was a cordial assent on the part of those who were present. The consideration of the constitution of the Boards of Studies and of the Governing Body was postponed to the next meeting on the 18th inst. It is expected that the faculties will elect Boards of Studies to conduct the examinations and lay down the conditions of degrees, and that the teachers will be directly and substantially represented on the Governing Body. The great defects in the constitution of the present university are, as we have pointed out, the non-existence of Boards of Studies as a medium between the teachers and the executive, and the absence of teachers on the executive, as the result of the present method of selection and nomination. These defects cannot exist by the proposed constitution on the new body, and the members of the executive will only be elected for a term of years instead of for life. It will thus be seen that the executive of the new Association has formulated a distinct and well-considered scheme, based on the experience of the older Universities, and essentially different from the present constitution of the University of London, and that such a scheme is in accord with the wishes of the teachers, and will be the basis of the reform which the University of London must prepare to grant if it is to stand in its present position as the Metropolitan University. The charge of vagueness in the aims of the Association is no longer tenable, and the name of a Teaching University is sufficiently justified by the scheme of its promoters. Whether one University is to rule education in London, or whether a rival is to be founded, will depend on the attitude of the members of the Senate of the existing institution; and as we should regret that two rival bodies should exist in London for the direction of the higher medical education and the conferring of degrees, we are glad to see that there are already some signs of a departure from the old *non possumus* on the part of the authorities of the present University. As was so ably urged by the deputation of the Metropolitan Counties Branch of the British Association, students who are well taught and of average industry should be able to obtain degrees, but for these they are obliged to leave London and reside at schools of medicine elsewhere. At the recent First M.B. Examination of the University of Durham, held at Newcastle-on-Tyne, only three students who passed had been taught locally, and the remaining twenty-nine, who came from Birmingham and the metropolis, will have to spend a year in Newcastle in order to obtain a degree, when they might pass that time in observing the greatest variety of medical and surgical practice and attending to the best clinical instruction in the kingdom by a residence in the metropolis. The reasons for the large entry of students at schools where degrees can be fairly obtained are obvious, and have but little to do with the teaching at such schools, and this is attested by such an exodus from London in the third or fourth year of studentship as that to which we have just referred. Every student is now aware that mere qualifications have not the same commercial value as a degree or title, and he will leave the best teaching if he can obtain a degree at another place. The greatest impediments to obtaining degrees in London are the non-medical examinations—viz., the Matriculation and the Preliminary Scientific M.B. Each of these requires special training, and a failure, owing to the absence of due facilities, so increases the time necessary to go through the curriculum, and the expense attendant thereon, that comparatively few, even well-informed and well-taught students, care to incur the risk. We are pleased to find that the Senate has come to a wise resolution regarding the Preliminary Scientific Examination, which should have been passed many years ago, and for which it would then have been thanked as a considerate reform, whereas now it is only supposed to have yielded to the pressure of the new movement. It has determined "that the Preliminary Scientific M.B. Examination be held twice a year; once, as at present, for Pass and Honours, in July, and once for Pass candidates only, in January." We believe that this resolution only awaits the sanction of the Home Secretary to come into force, and that students who pass in two subjects will not be re-examined in those subjects. A report by the Annual Committee to Convocation, at the meeting on the 12th inst., will give the Senate the opportunity of dividing the subjects of the Matriculation Examination in a similar manner, and we hope that it will make use of the occasion to alter the conditions of what is perhaps the most ill-judged, as well as the most stringent, preliminary examination in existence. But for the constant supervision of regulations and the guidance of the examiners, Boards of Studies are a necessity, and life-senatorships must be abolished before any real sympathy can be looked for between the students and the teachers on the one hand, and the executive on the other. Unless these reforms be forthcoming, the demands for a title or a degree by the members and licentiates of the Royal Colleges will gather strength, and we therefore welcome these suggestions of the promoters of a Teaching University, and are pleased to know that conclusions practically identical will soon be placed before the Senate of the University by the Sub-committee of the Convocation of the University. As a result of pressure from within and pressure from without, the Senate must yield to one of the most urgent educational demands of our time.

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"MENE, MENE, TEKEL," is written on the walls of the council-room of the Royal College of Surgeons; *but there* is apparently no DANIEL there to interpret the signs. The Fellows and Members are in revolt; but the Council, shut up in a fool's paradise, hears and sees nothing but assurances of absolute confidence and goodwill. A rude awakening may, however, be at hand. The Association of Fellows has proposed a scheme of reform which it will not sacrifice to the obstinacy or complacency of the Council; and it will be seen from the report in another column that the Association of Members has adopted even a more spirited and daring policy. Deliberately excluded from participating in the affairs of the College, and persistently ignored by the executive, the Members of the College of Surgeons have hitherto been denied and refused any corporate rights whatever beyond the payment of the fee of initiation. Numerically constituting sixteen-seventeenths of "the body politic and corporate," the Members have hitherto had no higher political status than that of *Licentiates.* For eighty-five years "THE ROYAL COLLEGE OF SURGEONS OF ENGLAND" has been the four-and-twenty gentlemen who have, by any means, succeeded in gaining admission into the Council. For forty-three years, or more than one-half of its total existence, this body of gentlemen was self-elected, and members of Council held office—which not seldom was highly lucrative—for life. This abuse was abated somewhat forty-two years ago, when the order of Fellows was instituted, from and by whom members of Council have since been elected. But the benefits that might otherwise have arisen from this extension of the franchise were craftily controlled and checked by the conditions which were imposed as to eligibility of candidates for seats in the Council and as to the mode of voting. Even under the amended Charter of the 15th of Victoria, it is provided that only Fellows who are of fourteen years' standing, and who are in practice of their profession of *surgeons*, are eligible as members of the Council; while the Charter of the 7th of Victoria provides that the voting shall be in person only. The effect of these conditions is, firstly, to render ineligible every Fellow of the College who does *not* practise what is called "pure surgery," and thereby to exclude all persons practising as physicians, apothecaries, or general practitioners, or who are devoted to biological science; and, secondly, to reduce the electorate to the two or three hundred Fellows who are able or willing to vote in person. Hence, practically, less than one hundred of the seventeen thousand members of the body corporate are eligible as members of Council, and of these any one may be elected into the Council by less than one hundred votes. Nor is this the worst. Once in the Council, a Member becomes henceforth and wholly irresponsible and unaccountable to those whom he nominally represents. Criticism and attempts to control the Council have been alike resented, and until within a few years many of its members lacked only the power, not the will, to make any published report of its transactions a penal breach of privilege. Under cover of its factitious sanctity the Council has perpetrated almost every form of corporate injustice and abuse. Its members have been permitted, as examiners, to appropriate one-half of the total revenue of the College; and undertakings which materially affect the status of the Fellows and Members, and alter the relations and constitution of the College, have been entered upon without even the knowledge of the Fellows and Members. For instance, the Fellows and Members were not consulted as to the wisdom, prudence, or propriety of the compact with the College of Physicians to hold a combined examination, nor have they been asked to sanction the arrangement which the Council has entered into to devote several thousands of pounds of the College funds to the erection of a building in Long-acre for the purpose of holding this conjoint examination.

Happily for the interests of medical education and practice in England, this autocratic career of selfishness, exclusiveness, and irresponsibility is nearly run. The Fellows and the Members of the College have developed active organisations for the eradication of these evils and for the effectual reform of the Council. Indeed, the danger at present is that the reaction may be too violent. It will be remembered that the Association of Fellows has recommended that *any* Fellow of ten years' standing shall be eligible as a member of the Council, whatever his sphere of practice or study, that not more than one-half of the members of the Court of Examiners shall have seats in the Council, and that no alteration shall be made in the constitution or relations of the College without the consent of the Fellows and Members. These recommendations, though unacceptable to and unaccepted by the Council, have been cordially approved by the Association of Members, and thus supported will no doubt commend themselves to the Secretary of State, to whom an appeal from the Council is about to be made. From the report of the annual meeting of the Association of Members, published in another column, it will be seen that this body is determined to extend to the utmost limit the sweep of reform, and to secure for the Members of the College direct representation upon the Council. The reasonableness and substantial justice of this endeavour cannot be called in question. It only remains for the Association to define what it believes to be the "*due representation*" of the Members, and to devise some scheme whereby these may be most easily and safely obtained, with the single aim and purpose of securing for the College that place in public and professional confidence and respect to which it is at present a stranger, but to which it is entitled by its importance and influence as an examining body and by the number and status of its *alumni.*

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IT was in 1857 that the Royal College of Physicians first undertook the compilation of a catalogue of diseases and morbid states, for the purpose of rendering the registration of disease more precise, and it was in 1869 that the first issue of the "Nomenclature of Diseases" was made to every member of the medical profession in Great Britain and Ireland. The work was issued subject to decennial revision, and accordingly in 1880 the College took steps for prosecuting the work anew. The Joint Committee, eventually formed, included members specially familiar with different departments, and the fruit of their labours is now being distributed throughout the kingdom. Of the need and value of the work it is hardly necessary to speak; the widespread use to which the Nomenclature has already been put affords sufficient testimony on that head. Statistical tables are drawn up on its plan, systematic treatises are written within its lines, and opportunity is given for greater precision in returns than could have been possible before. But with advancing knowledge and clearer insight into the nature and relations of morbid processes, there must of necessity be changes in terminology; and this the first revision of the Nomenclature illustrates in a striking manner. Terms that have fallen into disuse have disappeared, names of conditions which have become differentiated by more strict analysis are introduced, and the work marks the standpoint at which we have now arrived. That errors of omission may have occurred in the progress of so difficult a work is only natural, and that—as one critic has recently pointed out in our columns—there are even some errors committed is not to be wondered at; but the work as a whole represents well the most complete, and at the same time the simplest, attempt at a nosology that exists in literature.

It would scarcely be within the province of this article to analyse in detail the pages of this Nomenclature; but it may be well to indicate its general principles, and to illustrate some of its features by examples. In the first issue great pains were taken to supply a definition to each of the diseases included under the head of General Diseases. However useful such a plan might be, it had obvious disadvantages, for a precise definition of some diseases is hardly attainable. It is almost conterminous with a description Moreover, if such definitions were essential they should be applied to every section of the work, with the result that it would not only attain undue proportions, but would become a dictionary rather than a catalogue. All such definitions have therefore been rigidly excluded from the revised work; and although synonyms are freely introduced, a limit has been placed upon them wherever they have not received the sanction of a tolerably general employment. Thus, we do not find Dr. Carter's term, "spirillum fever," placed among the synonyms of relapsing fever, although "pythogenic" is retained as a synonym for "enteric" fever. The phrase "simple continued fever" is retained with the synonym "febricula"; but this lax expression, which medicine has as yet been unable to dispense with, is guarded by a definition that leaves it as indefinite as ever. The term still figures in mortality returns, and is a standing protest against the lack of diagnostic precision, just as under the cover of "infantile remittent," typhoid fever and tuberculosis have often been concealed. Amongst the new terms introduced in the list of general diseases are "epidemic rose-rash," a rather cumbrous equivalent for the expressive German word "rötheln"; "typho-malarial fever," the modified typhoid that prevails so much in the United States and elsewhere, but is practically unknown in this country; "malarial cachexia," "myxœdema," "parangi," of which a definition would have been welcome; "leucocythæmia," unqualified by the terms "splenic" or "lymphatic"; "hæmophilia"; "idiopathic anæmia," with its synonym "pernicious"; and "glycosuria." It will be observed also that the Committee have reverted to the terms "rheumatic fever" and "rheumatism" instead of acute, subacute, and chronic rheumatism; that they employ "osteo-arthritis" in preference to "rheumatoid arthritis," and "gonorrhœal arthritis" in preference to "gonorrhœal rheumatism." In all these directions we think they will meet with approval, as also in the omission of the term "puerperal fever" from the list. This authoritative step should do a great deal towards the discrimination of puerperal disease. The enumeration of morbid processes which opens the work is a new feature, as also is the nomenclature of syphilitic and tubercular conditions, all of which are in constant use in the description of local diseases. In the appendix, are to be found lists of parasites—of course exclusive of the boundless class of fungi and bacteria, but of truly remarkable length; lists of malformations and of tumours, the latter obviously based upon Virchow's classification.

Turning to the sections devoted to local diseases, one is struck by the fact that terms which were formerly current, being descriptive of symptoms rather than of the morbid states underlying them, are gradually being dropped. It will of course be very long before pathology is sufficiently advanced to enable us to give a name to every condition that is met with; and in the section on nervous disease the Committee, have decided to draw up a double list—one as it were denoting the pathological, the other the clinical, aspects of the affections met with. The section on diseases of the eye is much elaborated, and presents in several aspects—e.g., in the case of cataract—the more thorough and extensive knowledge which has been gained since the first issue of the work. Among diseases of the larynx we find "croup" retained without any qualification, and perhaps the Committee felt that it was best to leave it so than to introduce the adjective "membranous." Yet we would fain have seen this word eliminated, except in the symptomatic sense. Again, why are the terms "acute pneumonic" and "chronic pneumonic" prefixed to "phthisis"? and for what reason is it preferred to use the phrase "black induration" rather than "iron-grey induration" of the lung? or to retain "millstone-maker's phthisis," "grinder's asthma," and "miner's asthma," instead of recognising the existence of a group of diseases due to inhalation of dust, and classing silicosis, anthracosis, &c., as their varieties? There is altogether a lack of grasp in this section, or at any rate a want of appreciation of the distinctions created by modern pathological inquiry. "Acute nephritis" has been, and rightly, preferred to "acute Bright's disease," and practically the phrase "Bright's disease" is to be limited to "granular kidney." The list of surgical operations has been very much extended, and a comparison with the former edition will show how numerous have been the new operations introduced in the past decade. On the whole, we are well satisfied with the manner in which the work has been presented, and believe that it will do much to ensure accuracy in the description as well as in the registration of disease.

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Seldom have the Fellows of the Medical Society of London been more fortunate in their selection of Orator than in choosing Professor Humphry, whose address on Monday last was highly appreciated. Our readers will be enabled to judge for themselves of the manner and matter of this philosophical contribution to a subject of universal interest, for Professor Humphry dealt with his theme—old age—in a manner which could not but compel the attention of his whole auditory. By a most skilful use of antithesis he contrasted the natural life with the actual life as seen in Nature, and once more illustrated the truth of the statement that civilisation with its attendant sympathy defeats the operation of the law of so-called natural selection. For, as he so powerfully sketched, in nature the victory is to the strong, and decadence is anticipated by early death from lack of ability to contend against superior force. And yet if the animal body were suffered to pass unchecked through all its physiological changes, it would be seen that the decline of life proceeds as regularly and as harmoniously as the rise towards maturity. Just as all the constituent parts and organs are evolved from the germ, and co-operate in due proportion and harmony to the sustenance of the body, so when maturity is past and the downward process of development sets in, it does so in an orderly manner, without any derangement of the same harmonious working that was essential in the time of vigour. The body fails, as a whole, just as it is built up from a mass of protoplasmic cells; and healthy old age terminates in physiological death, which may be brought about by the slightest external interference, or by the inability of the vital organs to continue any longer to labour. This ideal picture is, however, the exception, for most men die prematurely. The survival of the fittest still obtains among mankind, but in a different sense from that in which the biologist employs it. Longevity implies the continual maintenance of health—that is, the preservation of each and every part of the bodily mechanism in its due proportion. Hence it is that only those who, by inherent quality of tissue, or by freedom from exposure to external influences that act injuriously upon the frame, or by strict regulation of habits and modes of life in accordance with the capabilities of the organs of the body avert untoward influences, who can expect to attain true old age and be eventually liberated by a painless normal death. Civilisation, that has done so much to prolong life by caring for the aged and helping those who are no longer able to help themselves, has done quite as much to defeat this object by rendering humanity more liable to disease, and even by introducing disease among mankind. Nature therefore asserts her sway, and premature death is still the rule; so that, when one considers how multifarious are the ways whereby degeneration and disease may attack the body, how insidious often is their approach, and how much they are favoured by the artificial and arduous existence of a restless and laborious community, we may be thankful that, in spite of all, the ideal old age sketched by Professor HUMPHRY is not only possible, but is probably year by year becoming more likely of attainment.

Many of the facts concerning the physical characters of aged persons collected by Professor HUMPHRY, by means of the Collective Investigation Committee, are at first sight contrary to preconceived ideas. That females are longer lived than males is to be expected, but it is interesting to learn that members of a phthisical family may attain great ages; indeed, in such proportion that the assertion is warranted that "the delicacy or peculiarity, whatever it be, of constitution, which is associated with the tendency to the development of tubercle, is not only not incompatible with longevity, but is not unfrequently associated with it." One can imagine that having lived through the period at which such individuals would be most disposed to tubercular infection they have lost the liability to it, for phthisis is pre-eminently a disease of adolescence and early maturity. Professor HUMPHRY dwelt at some length upon the skeletal changes that occur with advancing years, showing that the absorptive changes which take place in the cancellous tissue, and which so predispose to fracture of the neck of the thigh-bone and determine the loosening and falling of the teeth, are combined with increased ossific deposit on the surface of the long bones, whilst in the skull there is often a great increase in thickness, determined apparently by the shrinking of the brain. The statement that the rib-cartilages retain their elasticity, and the inference that their calcification is a morbid and not a natural process, will come upon most of us as a surprise, and so also will the statements made with regard to arterial degeneration and to the other processes which have hitherto been regarded as senile. It is a remarkable fact that in 362 persons above the age of eighty, the arteries were tortuous in only 71, and that in 311 the pulse is returned as being compressible. In the male, prostatic affections are not so frequent as is generally supposed; but on this and other points it will be well to await further evidence before drawing conclusions. It is doubtless true that the aged body is far less prone to disease than the young and mature; whereas the reparative power after wounds would, according to Professor HUMPHRY, seem to be remarkably active—a fact for which we have not as yet a sufficient explanation, although, as he pointed out, the same ready tendency to heal is to be seen in subjects otherwise debilitated. In this, as in other parts of his address, Professor HUMPHRY has suggested lines of inquiry which will well repay extended and careful investigation; and we doubt not that his words will greatly stimulate others to join in the work.

Annotations.

"Ne quid nimis."

OUR TROOPS IN THE SOUDAN.

IN our last issue our Special Correspondent in the Soudan, Surgeon C. L. Cunningham, forcibly draws the attention of our military authorities to the peculiarities of the climate, and at the same time warns them of the great danger likely to be incurred by leaving our officers and men exposed to its extraordinary summer severity. In this opinion we quite concurred, and had in these pages previously drawn attention thereto. Although our representative has spoken out fearlessly, and put forth statements that appeared almost incredulous regarding the terrible temperature of the Soudan during the hot months, and under which our troops would be compelled to eke out a truly miserable existence, we were scarcely prepared to receive so early a verification of it. The graphic and startling letters just come to hand from that hot quarter tell a sad tale of mournful suffering, and go far to prove that our representative has rather under- than over-stated facts as regards the rapidly-increasing temperature that sets in about the beginning of May, whilst they show that the prognostications put forth in our columns a week ago respecting the physical torture and mental suffering likely to be endured by our poor fellows when it becomes even warmer, are already, unhappily, more than fulfilled word for word, judging by that agonising appeal made publicly for relief from their protracted sufferings by those officers who have reluctantly been compelled to pen the letters in question. Take the following as a specimen:—

"Each day is twenty-four hours of physical torture and mental suffering. Seven of our men have died of enteric fever in the last twelve days, and although we only began to form our camp here five weeks ago, we have already 150 sick here. The food is bad, and we are still in rags, as no clothing has come up yet. No one speaks, thinks, or hopes anything but to go down. Anyhow, if they do keep the troops here all the summer, none will be left worth a straw. For God's sake write about it, and get other correspondents to take it up. They are generally the best friends the troops have, and now they are gone everything is concealed, and there is no one to say a word for the soldiers. Believe me, half of us will be lunatics before long."

SMALL-POX RISKS.

WHILE some members of Parliament are trying to make themselves conspicuous by attempts to disparage vaccination, the plague of small-pox is extending its deadly work in London and some of the provincial towns in a most painful manner. Mr. Hopwood bores the authorities of the Local Government Board with attempts to find out whether a case of small-pox has not somewhere occurred after revaccination—not content with the fact that for fifty years revaccination has been protective enough to save all the *employés* of the Highgate Small-pox Hospital from an attack, excepting one unfortunate man, a temporary gardener, who refused the boon and paid for his folly with his life, and the similar experience of all the hospitals in London, not only as to the security of the revaccinated, but the almost unfailing attack of those who neglected or refused to be revaccinated. It is not necessary to pretend that revaccination is an absolute protection; but it is very nearly so. Small-pox itself does not absolutely protect from small-pox. Unreasonable people every now and again turn up who have a second or even a third attack. Good revaccination in adult life seems a much more complete protection than a previous attack of small-pox. But no sensible person would be surprised at an exceptional case of small-pox after revaccination. The broad and undoubted protection conferred by revaccination remains, and staggers the detractors of a discovery which exceeds all others in its beneficence. It is most lamentable to have to record the occurrence of small-pox in Colonel Kennedy and others of the Canadian boatmen, since their arrival in London, on their way home from services so efficient on the Nile. There is a marked increase in the admissions of cases in the hospitals of the Asylums Board. It cannot be too plainly stated that no one is safe who has not been successfully revaccinated. Revaccination that does not take is a delusion and a snare. Let no one rely on Leicester impunity. The isolation of cases in this metropolis if ever practicable, is not so now. The turn of Leicester will come some day. Meantime, every unrevaccinated person is liable to an attack of the disease.

PUBLIC LAVATORY ACCOMMODATION.

PUBLIC LAVATORY accommodation for men and women has for many years been one of the most pressing wants of the metropolis. The want is admitted on all sides, but from various causes the provisions for meeting it have been, and still are, inadequate. It is satisfactory therefore to note that the vestry of Paddington have had the matter under consideration. So long ago as March, 1884, a special committee was appointed to consider and report as to whether lavatory accommodation could not be provided in such a way as to be a boon to the immediate vicinity in which it is placed, instead of being a nuisance, as must be the case more or less where structures for this purpose are erected in the centre of public thoroughfares. The area of Paddington alone is about 1280 acres, and in 1881 the population was 107,218, and yet but for private enterprise there would not be a public convenience in the whole parish, nor sanitary accommodation of any kind for women, except in connexion with the baths and wash-houses in the Queen's-road. On the 1st inst. the committee adopted a report for presentation to the vestry, in which they recommend that each licensed victualler should be called upon to provide proper and convenient accommodation, with suitable automatic flushing cistern; that better designed structures than those at present in use should be employed, each as far as possible being in charge of an attendant; and that two new underground public lavatories should be constructed. The subject is unquestionably one of considerable importance to the community, and should the suggestions of the committee be adopted *in toto* by the vestry, something at least will have been done to remove what is a great drawback to the comfort and health of the inhabitants of the metropolis.

THE PATENT MEDICINES STAMP ACT.

THAT the Chancellor of the Exchequer should have consented to a modification almost amounting to a repeal of the Patent Medicines Stamp Act is a subject for congratulation. The news will be received with feelings of pleasure by the public in general, and by the medical profession in particular. The stamp, we are told, will be so altered as to make it clear that it affords no guarantee of the genuineness of the preparation. Medicines are in future to be regarded as taxable only if proprietary. The term "proprietary" is somewhat vague and indefinite, and will be found difficult of definition, and still more difficult of application. We have occasion from time to time to call attention to special preparations of pharmacopœial and other drugs, which are introduced by chemists as being manufactured with exceptional care, and perhaps by some new process. The use of such remedies, which are neither secret nor patent, is a distinct benefit both to doctors and patients, and it would be most undesirable to hamper the progress of knowledge and discovery by taxing improvements. It would be better to substitute for the word proprietary the term "secret." With this exception the decision of the Chancellor of the Exchequer is all that could be desired. Secret remedies should undoubtedly be heavily taxed, for their use is a fruitful source of danger.

ATROPHY OF MUSCLES IN PLEURISY.

WHEN synovitis attacks a joint, the muscles which effect the movements of the articulation are prone to waste in a rather rapid manner. The muscular atrophy cannot reasonably be explained on the ground that the muscles are not used, for the atrophy is one which recalls the wasting of muscle seen in cases of infantile palsy, not only in the rapidity with which it occurs, but also in the behaviour of the affected muscles to electrical examination. The wasting of the muscles of the shoulder and thorax on that side which has been the seat of pleurisy seems to us to belong to the same category of phenomena as the wasting of muscle from joint disease; and although the comparison is a trite one, yet we may remember that serous and synovial membranes are regarded as analogous structures. The subject of muscular atrophy resulting from inflammation of tissues in the neighbourhood of the muscles is one deserving of much attention. The most probable explanation is that the abnormal excitations proceeding from the inflamed tissues along the sensory nerves have a direct influence on the motor nerve cells controlling the nutrition of the muscles concerned; the bones may waste as the result of a similar "reflex" influence. A valuable paper on the atrophy of muscles of the thorax and shoulder in pleurisy was contributed to the Société Médicale des Hôpitaux on April 10th (see the *Bulletins et Mémoires de la Société*, &c., April 22nd). The author of the paper, M. Desplats of Lille, contends that the muscular atrophy is rapid and frequent in the subjects of pleurisy, that the atrophy plays an important part in the deformities of the skeleton resulting from pleurisy, and that the atrophy is the indirect cause of tuberculosis of the lungs. He recommends that the atrophy should be prevented from coming on by early surgical treatment of any pleuritic effusion, and that measures should be adopted for arresting or combating the atrophy by the use of general and local stimulants, and more especially by faradisation, respiratory gymnastics, compressed air, and so forth.

THE DEATH OF PROFESSOR PANUM.

WE regret to have to record the death of Professor Panum of Copenhagen, the President of the last International Medical Congress. Professor Panum has for many years been known as one of the ablest workers in the field of medical and physiological science. His observations have been made largely in the field of scientific pathology, and he has left behind him many a mark in one of the most difficult fields of medical research. Panum exhaustively treated the subject of transfusion by physiological experiments, and in the work in which this subject was dealt with he gave an account of an elaborate series of experiments on artificial embolism of the various vessels of the body. He showed that fibrin is not necessary for resuscitation by transfusion, and that even with the greatest care it may act injuriously by clotting. His work on Embolism ranks with the classical writings of Virchow and O. Weber. Panum long ago worked at the nature of the virus of septicæmia, and came to the conclusion that it was independent of the agency of living organisms. His address on Food Rations for Man in States of Health and Disease, delivered at the International Medical Congress last year, contains valuable suggestions on the physiology of diet. Some of his latest work related to the formation of "physiological fistulæ" into the small intestine, with a view of studying the nature and properties of the intestinal juice uncontaminated with other secretions. The death of the Professor of Physiology of Copenhagen is a great loss to medical science.

FRACTURED RIBS AND SCURVY IN LUNATICS.

COMPLAINTS are made in the Russian medical press of intriguing and underhand behaviour on the part of the administrative body of the Odessa Hospital towards the medical staff. Relations seem to have been strained for several years past, for in 1879 the late Dr. Kleberg, who was principal medical officer, and his successor, Dr. Siljujanoff, both resigned their posts after a short tenure. Recently Dr. Grjasnoff, tired out by the vexatious and worrying treatment to which he was subjected, has also resigned. Dr. Andrusski, the chief of the lunatic department, has been hastily dismissed, most unjustly as it appears to the journal from which we quote, on account of fractured ribs having been found in the bodies of two of the patients who died. At the official investigation it was proved by the medical evidence that the bones in both cases were diseased, and might have been very easily broken by the pressure of the thorax on the edge of the bed. One patient had general paralysis and scurvy; the other chronic meningitis, pulmonary tuberculosis, Bright's disease, and scurvy, the whole osseous system, especially the ribs, being in both cases in a highly pathological condition. If the fractured ribs had anything at all to do with the death, it could only have somewhat accelerated the fatal issue of totally incurable diseases. Fractured ribs are sometimes found in the bodies of lunatics in this country, and explanations are usually offered depending upon the pathological condition of the osseous system of lunatics. But scurvy is not a frequent disease in English asylums. Surely the occurrence of two such cases should indicate to the Odessa hospital authorities the propriety of an investigation into the dietary scale to which the patients are subjected.

MEDICAL SOCIETY OF LONDON.

A LARGE and distinguished audience listened to the annual oration of the Medical Society of London, delivered by Professor Humphry, F.R.S., on Monday last. The oration, which will be found in full in another place, was frequently applauded. Sir Joseph Fayrer proposed, and Mr. Arthur E. Durham seconded, the vote of thanks which was heartily accorded to Professor Humphry. Dr. W. Miller Ord, the President, expressed the wish of the Society that the oration should be published in separate form. The conversazione was enlivened by the exhibition of many objects of interest, including water-colour drawings, wood-carvings, Japanese books and prints, old medical works from the library of the Society, autotypes, etchings and engravings, microtomes and microscopes, whilst the band discoursed the lively airs of many a well-known dance. It must be owned that with its annual dinner and conversazione the Medical Society of London serves in addition to its other functions, the useful and pleasing purpose of bringing together the diverse elements of which the medical profession is composed.

PHTHISIS IN THE ARMY.

THE mortality of soldiers from phthisis is just now attracting some attention, and has been the subject of many random statements. The Army Medical Report for 1882 gives the mortality from "tuberculous diseases" among the troops serving in the United Kingdom during that year "as equal to 2·00 per 1000 of the average strength, against a mean rate of 2·33 in the preceding three years. The *United Service Gazette* compares this rate among soldiers with the rate among the entire population of England and Wales, during the same year, which was 1·84 per 1000, adding that, having regard to the favourable sanitary conditions of the army, the rate should rather be compared with that prevailing in some of the healthy districts of England—for instance with 1·17 in Rutlandshire, 1·31 in Leicestershire, and 1·33 in Hertfordshire. Our contemporary admits that for exact statistical comparison these figures are open to criticism; the amount of fallacy involved, however, by such a comparison can lead to but one conclusion—namely, that no such comparison should have been made. The incidence of phthisis mortality upon males of different ages varies from 0·41 per 1000 between five and fifteen years to 4·12 between thirty-five and forty-five years. To compare, therefore, the mortality of soldiers from phthisis with that prevailing in the entire English population, male and female and at all ages, is worse than useless. The mean annual death-rate from phthisis among males in England and Wales aged from twenty to forty-five years during the ten years 1871 to 1880 was equal to 3·68 per 1000, which is not far short of double the rate that prevailed in 1882 among the soldiers serving in the United Kingdom. We are very far from asserting that the comparison of the death-rate of soldiers from phthisis with that of all males living at similar ages is by any means free from objection. If we accept the deaths from tubercular diseases in the army, as signifying the deaths from phthisis, there is still the source of error due to discharges on account of disease to be dealt with. On the other hand, we are scarcely inclined to accept our contemporary's favourable estimate of the healthy conditions of a soldier's life. Soldiers are in a certain sense selected men, but the habits of too large a proportion of our soldiers are, we fear, not unlikely to develop phthisical tendencies; and under present circumstances it would not be surprising to find them suffering from a death-rate from phthisis as high as the mean rate among males at the same ages in the general population. It is to be regretted that the statistics of the Army Medical Report are not sufficiently precise to render possible the calculation of the true death-rate from phthisis among soldiers, but we see nothing in the figures given to justify the alarm of the *United Service Gazette*.

STATE SANITARY SURVEY IN ILLINOIS.

THE Secretary of the Illinois State Board of Health has issued a circular, in which he points out that whenever cholera has prevailed as an epidemic in Europe it has eventually reached the United States, and has caused great havoc there. Until quite recently there was little or no sanitary organisation in Illinois, and this, coupled with the fact of the unrestricted immigration, places the State in a condition favourable to the reception of cholera. Under these circumstances, municipalities, communities, and individuals are urged to see that their surroundings are wholesome, and forms have been prepared with a view of facilitating the needed inspections on which the required action must be based. The survey proposed is different from the one now being undertaken in this country. Here, the inspectors of the State make cursory inspections with a view of stimulating local action; but in Illinois it is expected that the inspections shall be altogether carried out by local officers, and take the form of a house-to-house inspection. The forms on which the information acquired is to be filled in are extremely useful, and the preparation of a ground plan, with lines at intervals indicating a scale of feet, will be most helpful in enabling the local inspectors rapidly to draw trustworthy plans of houses and other premises. Dr. Rauch in his circular does not fail to point out that to which prominence has also been given by Dr. Buchanan in this country—namely, that even should cholera not reach the country to which the inspections relate, the work advocated will, if properly carried out, go far to save the State from many other diseases which are allied to cholera in so far as the conditions causing them are concerned.

STRANGULATED HERNIA.

AN inquest was held at Stockport on April 25th touching the death of a woman named Elizabeth Jackson, aged forty-two. From the evidence it appears that for some years deceased had suffered from an umbilical hernia, which had from time to time given her some trouble owing to its becoming obstructed. On April 11th Mr. Gardener, a graduate of the University of Bonn, practising at Portwood, was called in, and he continued in attendance until April 18th. On the latter day the woman was seen by Mr. Buist, assistant house-surgeon of the Stockport Infirmary, and this gentleman diagnosed strangulation of the rupture, and gave the patient "medicine which was intended to set the bowel at rest," as he did not think it safe to reduce it at that time. Death occurred on April 22nd, without relief to the symptoms, although Mr. Buist says he performed taxis *successfully on the Monday before the patient died.* At the inquest Mr. Buist seemed inclined to join issue with Mr. Gardener, both as regards the exact nature of the malady and its appropriate treatment. In the absence of any record of a post-mortem examination, it seems to us that there can be little doubt that the deceased had obstruction of the prolapsed bowel, and that this passed on to complete strangulation, for the history of the case relates what comes too frequently within the experience of hospital surgeons. We cannot quite understand why Mr. Buist should desire to censure Mr. Gardener for not recognising that the bowel was strangulated, as evidenced by the continued stercoraceous vomiting, and yet not take the steps to relieve that strangulation by the only rational means which he himself contended ought to have been adopted. Mr. Buist's own evidence and the questions he put to Mr. Gardener are inconsistent with one another. It may be, however, that we are not correctly informed on this head. One thing is certain, if the symptoms and signs were as manifest as they were described to be, neither medicine in the earlier, nor taxis in the later, stages was likely to avail much. It cannot be too strongly insisted on that the danger is not from operating too early, but not early enough. It is not altogether improbable that the taxis, as performed by Mr. Buist, was accompanied by rupture of softened gangrenous bowel, and that what appeared a satisfactory event was, in all truth, a fatal calamity. It is but just to Mr. Buist to say that he clearly recognised the condition of the patient; and further, that even had herniotomy been performed when he first saw the case, the prognosis would still have been grave to a degree. It may be useful here to draw attention to a fact of paramount importance—viz., that a hernia which for several hours has given rise to acute local and reflex symptoms should be subjected to the most careful examination and prompt efficient treatment. If we mistake not, many a student leaves our medical schools without having ever seen, from its incidence to its close, a case of acute strangulated hernia. This we mention, not by way of reproof, but with a hope that our hospital surgeons will endeavour, by all the means in their power, to give facilities to the general run of pupils to investigate for themselves the phenomena of hernia, and the accidents to which it is liable.

PUBLIC SCHOOL POLICE.

THE approval which greeted Sir William Harcourt's announcement in the House of Commons that he had directed an inquiry to be made by the Public Prosecutor into the fatal case of "bullying" at King's College was an expression of a very general mistrust in the management of our public schools. We have from time to time called attention in our columns to a growing dissatisfaction on the part of those most interested in the development of our public school system. The prospect of little boys of twelve years of age mingling freely with other boys of various ages up to eighteen or nineteen, often much to the injury, physically and morally, of all, is far from satisfactory. Parents scarcely at present realise the terrorism so aptly referred to by the Home Secretary which the bigger boys exercise over the smaller and weaker. We should be glad if we could think that the association of little boys with bigger had its worst phase in the exercise of "terrorism," for, unfortunately, we know too well that there is a "social evil" in this association which parents, as a rule, shrink from realising. It is only too well known in the medical profession that the ruin of many a little boy may be traced to the evil influences of immoral bigger boys. We know of no "social evil" which has been so unsuccessfully dealt with. Important as the suppression of "bullying" is, it sinks into insignificance in comparison with the larger question of the moral relations between big and little boys in unrestrained intercourse. The governing authorities of our schools, as a rule, meet three or four times a year. The most they do is to express approval or disapproval of some prominent subject brought under their notice by the head master. It is seldom that they are minutely acquainted with the working of the school. The more distinguished they are socially, the less useful are they as governors. It was once publicly remarked by the late Archbishop of Canterbury that his experience as school-master and governor taught him that the highest function of a school governor was to learn not to interfere with the head master. Thus the head master, in reality, becomes responsible for the educational, physical, social, and moral relations of the hundreds of boys committed to his charge. Many of these boys pass through his school, if a large one, scarcely known to him either in name or person. His influence over them is, in reality, very small. It rests chiefly with the assistant masters and tutors to guide boys aright; and their intercourse with them out of class, where most danger prevails, is very limited. It would be unreasonable to expect men worn out by six or eight hours' class work a day, to say nothing of the additional labour of looking over exercises and conducting correspondence, to discharge the duty of a kind of "police." Yet some system of school police is a growing necessity to keep in check the too free secret intercourse between big and little boys, and suppress the great "social evil" of our public schools.

EXCISION OF THE PYLORUS.

AT a recent meeting of the Hamburg Medical Society (*Deutsch Med. Woch.*, No. 17) Dr. Lauenstein reported a successful case of excision of the pylorus, and exhibited the patient, a sailor, thirty-four years of age. The portion removed, which was the seat of colloid cancer, measured eleven centimetres long, with a circumference at its gastric end of twenty-six centimetres. The patient was admitted into hospital on Dec. 20th, 1884, having suffered for several months from vomiting, and having lost about forty pounds weight. A moderately large, slightly mobile tumour was present in the epigastrium, but the stomach was not notably dilated. The stomach was thoroughly washed out before operating. The incision was made in the median line, and the pylorus, after being separated from the great and small omenta, was marked off from the duodenum, which was temporarily ligatured. Some adhesions of the posterior wall of the stomach were detached, and the segment extirpated according to the usual method. There was no disease of the glands in the vicinity. The abdominal cavity was closed after washing out with boracic solution, and the whole operation lasted two hours and a half. Recovery was rapid, and in about a fortnight solid food was given by the mouth. On the nineteenth day the patient had an attack of herpes, with fever and bronchial catarrh, but at the close of the third week he was able to leave his bed, and had an "enormous" appetite. The author remarked that during the past two years the results of this operation had been more favourable, and there was reason to hope that, by improvement in its method, a still greater reduction in the mortality would be attained.

THE LEWES LUNACY CASE.

WE entirely agree with Lord Coleridge that the so-called "examination" of Mr. Hillman was a farce. It is not, of course, for us to offer an opinion as to the *legality* of the examination conducted by the magistrates in this case. It may be that the Lord Chief Justice is wrong and that Sir James Hannen and Lord Justice Lindley are right. Perhaps the law may be satisfied by the fact of two magistrates looking into a carriage at an alleged lunatic already in custody, while he is actually on his way to an asylum, and after a couple of commonplace questions, such as "How are you?" signing an order for his consignment to the asylum, to which, as a matter of fact, he was then being forcibly taken. We say it *may* be that the law is satisfied with such a procedure; but if it be, we must be excused for adding, so much the worse for the law. We fail to see any difference, except in degree, between such a proceeding as that which took place in this case, and the fact of a judge—for convenience, to avoid taking a person out of the prison van—looking into that vehicle, and after asking the accused some ridiculous questions, sentencing him to prison and telling the coachman to drive on. If this is the way in which justice is to be administered, it ought to be generally understood. For ourselves, we can only say that anything more slipshod or ridiculous than this case throughout we cannot imagine. It is certainly high time a Lunacy Law Amendment Bill were passed; but this case ought to be a warning to the promoters of such a measure to see that provisions are incorporated to ensure that the justices, to whom so much more than has heretofore been left is to be now confided, may be compelled to discharge their duties efficiently. It must be assumed that no one does right, unless to leave right undone, not less than to do wrong, be illegal.

THE BUDGET.

WE must content ourselves with one or two plain criticisms of the proposals of the Chancellor of the Exchequer, leaving minute criticisms to financial authorities. First, we cannot but deplore that under a Ministry so professedly peaceful such an enormous Budget should have become necessary. No more striking proof could be afforded that statesmanship does not consist in passing mere Franchise and Ballot Bills, but in skilful recognition of the wide relations of the Empire and its corresponding risks. Next we must protest against the rough process by which the income-tax is applied to those whose income represents labour, and is precarious compared with those whose income is assured and arising from accumulated property. We approve of the higher taxation of spirits and beer. The amount of both of these articles consumed by the British public is disgraceful and disastrous, and any taxation which will reduce the amount will tend to diminish the disease and misery which come from drunkenness.

HEALTH OF CAVALRY HORSES.

The Report by Mr. Fleming, Principal Veterinary Surgeon to the Army, on the Health of the Horses serving in the United Kingdom during the year 1884, shows very satisfactory results. The average strength on the establishment was 12,054, the cases of disease and injury during the year were 7431, the deaths including horses destroyed were 207, and the number cast was 1272, being respectively in the proportion of 616 cases, 17·17 deaths, and 105·6 cast per 1000 of the strength. The sickness and mortality have been lower than in any of the three preceding years, and the casting lower than in any except 1881, when it amounted only to 93·8 per 1000. A striking feature in the returns is the almost complete absence of glanders and farcy, only one case of the former and none of the latter having occurred during the year. The case of glanders was in the 3rd Hussars at Hounslow, in which eight cases had occurred in the preceding year. Mr. Fleming remarks that "this is the last of the outbreak which took place in that regiment while it was stationed at Aldershot, the infection which led to the outbreak having been caught, in all likelihood, in billet stations in the East of London (where the disease always more or less prevails) while the regiment was on the march from Colchester to Aldershot in 1883." He apparently has forgotten that the disease "was contracted from an officer's charger which became infected at Alresford." The measures adopted in the army to stamp out this disease appear to have been attended with marked success. Accidents and injuries have been the most frequent cause of admission into the infirmary, and account for rather more than half of all the cases. Diseases of the digestive organs have been the most fatal class, enteritis being the most prominent disease, but those of the respiratory apparatus have been very nearly as fatal.

The most frequent cause of casting was old age, upwards of one-half of the cases being on that account; the average length of service of the horses so cast was thirteen years and a half. The highest proportion of admissions into the infirmary occurred among the four-year-old horses, a result probably of the number of new horses brought into the service at that age and of the consequent change of work and feeding. The death-rate was also highest among them and the five-year olds until the age of fifteen was reached, when it began to increase rapidly. There were 1274 horses purchased during the year at an average price, including expenses of journey, of £44 6*s.* 10*d.*, and there were 1189 cast and sold at an average of £11 5*s.* 2½*d.* We are glad to observe that Mr. Fleming has added to the value of his annual return by prefixing to it a report on several points which appear likely to be useful and instructive. We would suggest to him that an additional table, showing the average loss of time by sickness or injury—the mean daily sick of the horses,—would add much to the value of his returns. We sincerely congratulate him on the satisfactory state of the department over which he presides, as shown by the interesting tables in his report.

COCAINE IN EYE OPERATIONS IN ST. PETERSBURG.

Dr. Lange of St. Petersburg has extirpated two eyes under cocaine. He not only applied a 20 per cent. solution to the conjunctiva before the operation, but had it dropped on during the whole procedure. In one case complete anæsthesia was induced, the patient feeling no pain during the section of the ciliary or optic nerves. In the second case there was throughout considerable flinching on the part of the patient, due perhaps to mental reaction, as the eye preserved the power of vision, and was being removed for an injury. Dr. Lange has also performed an operation on the eyelids, applying previously an ointment of cocaine with vaseline, and after each cut a solution. The pain was very slight. The patient wished to have the other lid operated on without cocaine, but the suffering was so great that the drug had to be employed.

THE INTERNATIONAL INVENTIONS EXHIBITION.

On Monday last, at noon, the Inventions Exhibition, the third of the series held at South Kensington, was formally declared opened by the President, the Prince of Wales. The opening ceremony took place in the conservatory, in the presence of the Princess of Wales, the Princesses Louise, Victoria, and Maud of Wales, the Duke and Duchess of Edinburgh, Prince and Princess Christian, the Duke of Cambridge, and a large and distinguished company of visitors. Sir Frederick Bramwell, as Chairman of the Executive Council appointed to organise and carry out the Exhibition, welcomed his Royal Highness within its walls, and delivered an address briefly reporting upon the labours of the Council up to the time of opening. He publicly expressed to the contributors to the guarantee fund the sincere thanks of the Council, stating that, instead of £50,000 which had been contemplated as the amount that might be raised, more than £87,000 had now been guaranteed, and that this total is being augmented week by week. He pointed out that considerable additions had been made to the Exhibition buildings. Many small annexes had been swept away, and in their place spacious galleries had been erected. Not only had greater exhibiting space been thus obtained, but the gardens, which are so great a source of attraction to visitors, had actually been enlarged. He said that as the employment of electricity for the purposes of lighting was undoubtedly one of the most striking instances of the application of science to the purposes of daily life, special prominence had been given to the subject. The incandescent electric lamp was to be employed for the garden illumination in a manner and on a scale which, the executive believed, had never before been attempted. With regard to the "music" division of the Exhibition, he stated that, with a view of stimulating the love of music in this country, a series of choral and brass band competitions were being organised, and would be held in the Royal Albert Hall during the autumn. His Royal Highness, in his reply, expressed his wish that the efforts of the Council would be rewarded by a success as great as that which attended the previous two exhibitions. He then declared the Exhibition open. We think there can be little doubt that the Prince's wish will be fully gratified. Although much remains still to be done, there is ample evidence of the interesting and widely varied nature of the exhibits included in the divisions "Inventions" and "Music;" the latter will indeed probably render the illuminated gardens, already in themselves on a hot summer's evening sufficiently attractive, peculiarly appropriate and additionally popular, forming as it does one of the *raisons d'être* of the Exhibition. The subway from South Kensington Station is a decided success, and will not only add to the comfort of visitors, but will remove a source of annoyance to inhabitants of the district.

THE PREVENTION OF YELLOW FEVER.

Dr. Domingos Freire, in a recent communication to the *Rio News*, gives an account of the inoculations practised in Rio de Janeiro with the attenuated liquid culture as a prevention against the dangers of contracting yellow fever. From Dec. 22nd last up to March 22nd of the present year, 1109 persons of different nationalities, and whose ages ranged from one month to sixty years, were submitted to subcutaneous injections in the deltoid region of the arm with the said liquid. All, with the exception of one or two cases, experienced elevations of temperature, varying from 37½° C. to 40° C., frontal headache, pains in the articulations, general indisposition, and, in some, slight epigastric oppression,—symptoms which ceased after from twenty to forty hours, and without any medical intervention. In many cases these injections were practised in houses where, a few hours before, deaths had taken place from yellow fever; nevertheless in the cases specified, and under disadvantageous hygienic circumstances, not one single serious accident is said to have happened. Most of the inoculations were performed in the presence of the two medical men commissioned by the Spanish Government to specially study yellow fever in Brazil.

KINDNESS TO ANIMALS.

The celebration of May-day in London seems likely to take a new and very sensible form. It has long been the custom in some provincial towns, we believe, to hold an annual procession of cart-horses on May 1st, and this year the metropolis has made an effort in the same direction. We say an effort, because probably for want of organisation and publicity only about one hundred teams attended this May-day parade on the Thames Embankment. It is stated that there were no prizes, and therefore no competition; but each driver received an illuminated card commemorative of the gathering, acknowledging the evidence afforded of "care, attention, and kindness to animals." It is with this feature of the show that we are mainly concerned, and we trust that next year the idea may be carried out on a larger scale, and that prizes may be given to encourage kindness to animals. In this connexion we would repeat a suggestion we have already made, that prizes for kindness should be offered at the various cattle, horse, and agricultural shows throughout the kingdom. At Chobham, in Surrey, a prize of this sort, which is given annually, has been very successful. "Want of thought" is responsible for much evil, and such prizes would be the means of doing a great deal of good.

UNIVERSITY OF LONDON.

THE following important change in the examination for the degree of Doctor of Science is announced in the new Calendar of the London University:—The existing syllabus of the D.Sc. Examination with its division into sixteen branches is withdrawn. Any Bachelor of Science desiring to proceed to the degree of Doctor of Science shall be required to submit an original essay, dissertation, or thesis as the foundation of his qualification for the Doctorate. If the thesis be accepted, the candidate shall be examined upon the subject-matter thereof, and in such further cognate subjects as in the opinion of the examiners may appear necessary to test his knowledge of the branch of science which he professes. The examination for the degree of Doctor of Science shall take place annually within the first twenty-one days in June.

MEDICO-LEGAL ASPECTS OF THE LATE EXPLOSION AT THE ADMIRALTY.

THE conclusion which has been arrived at as to the position of the gentleman who was injured by the explosion is as follows. He was probably about to leave the office and had partly risen from his chair, placing his hands on the desk in front to assist himself, when, hearing a noise, he turned sharply to the left in the direction of the cupboard. The scalp wounds, all in the anterior part of the scalp, were in a line from before backwards, and from left to right. The large wound of the left conjunctiva, caused by a splinter, which was removed soon after the explosion, was from without inwards in the direction of the lacrymal bone, and was unaccompanied by wound or injury of the eyelids. The backs of both hands, also the inner side of the left and the outer side of the right, were dotted with grains of gunpowder; the scalp was extensively dotted in the same manner, chiefly over the left frontal region; the hair, eyebrows, and eyelashes were singed. The patient was found lying near the cupboard, with his head in that direction, and not towards the right in the direction of the force applied.

TRICHINOSIS IN ST. PETERSBURG.

A CASE of trichinosis has recently occurred in St. Petersburg. A gentleman named Von Bach and his guests were infected by ham. Altogether about twenty persons suffered. The occurrence has produced some alarm, and the trade in pig-meat has sensibly diminished. It is, however, gratifying to note that this seems to have been the only case of the kind occurring in St. Petersburg for some years past. The immunity is due to the establishment by the municipal council of institutions where pork and ham are carefully examined. The first of these was established in 1881, but was not very successful; as during the first five months only five carcases and 133 hams were offered for examination, notwithstanding the smallness of the fees charged and the certainty of an indemnity at market price in case trichinæ were found. In May, 1882, a different system was established, and during the next twelve months no less than 30,000 examinations took place, requiring the services of two veterinary surgeons and about a dozen assistants. Afterwards branch institutions were established, some of them by the traders themselves, and microscopical examinations systematically carried out. Last year there were examined 30,650 carcases, 2332 hams, 18 portions, and 11 wild boars. Those free from trichinæ are marked, all infected meat being destroyed. An interesting engraving of the chief institution is given in a Russian illustrated journal, in which a number of young women are represented seated at a table each with a microscope before her.

THE MEDWAY GUARDIANS AND THE LUNACY LAWS.

THE subject of the Lunacy Laws has been under discussion by the Medway Board of Guardians, who propose to memorialise the Local Government Board on the subject, suggesting that "all cases which come under the relieving officer's notice should be certified to by the medical officer and then removed to the workhouse for a period not exceeding fourteen days, when they could be taken before a magistrate who could order chronic harmless cases to the workhouse and others to the asylum." Dr. Buchanan said they had recently had a case in point. Mr. Athawes had to hold a court on Sunday to make an order for the removal of a woman to the asylum; this patient, until the recent decision, would have been temporarily removed to the workhouse. The woman had to be taken to the police-station and placed in a cell, after having attempted to strangle one of her children. Other parochial authorities also have had the matter under consideration, and the Whitechapel guardians have adopted a petition to the House of Lords on the subject.

MEDICAL MISSIONARIES.

WE learn from the *Church Missionary Intelligencer* that Dr. E. Downes has decided not to return to his former charge of the Mission Hospital in Kashmir. The committee accepted his resignation with regret, and placed on record their appreciation of his valuable services. They have recently accepted the offers of Mr. F. J. Harpur, B.A., M.B., B.Ch., of Trinity College, Dublin, and of Mr. Henry Martyn Sutton, M.R.C.S., L.R.C.P., L.S.A., for service as medical missionaries.

MILITIA SURGEONS.

WE would again draw the attention of the militia surgeons to the fact that Sir E. Wilmot's motion to refer their case to a Select Committee of the House is fixed for May 19th (Tuesday); and we would urge on every militia surgeon to use his influence to obtain members from both sides of the House to support the motion, which is not a party one.

THE municipal authorities of St. Petersburg and Moscow have had under consideration the measures to be adopted in case of the appearance of cholera. The St. Petersburg town council has given the town sanitary commission a credit amounting to 30,000 roubles for preventive measures, erection of cholera hospitals, &c. The Moscow council has voted 98,000 roubles for a similar purpose. Both the municipal councils have agreed to petition the treasury for assistance to the extent of 300,000 roubles in case a cholera epidemic should make a larger outlay requisite.

THE International Cholera Conference will open in Rome on the 15th inst., when it is expected that the delegates of the British and Indian Governments—namely, Sir W. Guyer Hunter, M.D., K.C.M.G., and Dr. Thorne Thorne on behalf of this country; and Sir Joseph Fayrer, M.D., K.C.S.I., and Surgeon-Major Timothy Lewis for the Indian Government—will be present.

THE Caucasian Medical Society has made Dr. Hoyer, Professor of Histology, Embryology, and Comparative Anatomy in the University of Warsaw, an honorary member in recognition of his services to science.

Dr. Diomede Pantaleoni, Senator of the Italian Kingdom, one of the leading members of the Academy of Medicine of Rome, and for many years a physician in high repute with the Anglo-American Colony in the city, died there, at an advanced age, on Sunday the 3rd inst. We hope to give next week some account of his career.

Acting on the suggestion of Mr. J. Mills, the inspector of cattle disease for Madras, the Government of India some time ago decided to test the efficacy of M. Pasteur's vaccine for the protection of animals against anthrax. From official papers recently published, it would seem that the results have been satisfactory.

By an advertisement in our present issue it will be seen that the courses of clinical lectures for the summer session, to be delivered at the Hospital for Sick Children, Great Ormond-street, by the physicians and surgeons of the institution, will be commenced next week.

At a meeting of the Cork County Club held last Monday, Dr. Charles Tanner, for his conduct during the recent visit of the Prince of Wales, was expelled from the membership of the Club. Ninety-one members voted, and of these eighty-nine were for his expulsion.

The Master of the Rolls has dismissed the appeal in the case of Hugall *v.* M‘Kean, an action brought against a landlord for an alleged breach of covenant to keep drains in good order, in which judgment for the defendant had been entered by Mr. Justice Wills.

A conference upon cholera was to meet at Berlin on Monday last, and Professor Pettenkofer was expected to attend. We have not yet received the reports of the meeting, at which, doubtless, Professor Koch will have detailed his recent researches.

The Italian Prime Minister has given an emphatic denial to the statement that there had been two cases of Asiatic cholera at Rome.

Dr. Robert Koch has been nominated Professor of Hygiene at the University of Berlin.

LUNATICS IN WORKHOUSES.

At a meeting of the Council of the Poor-law Medical Officers' Association, held at 3, Bolt-court, Fleet-street, on Tuesday, the 5th inst., certain of the clauses of the Lunacy Law Amendment Bill, now under consideration in the House of Lords, were passed in review, and considered in their bearing on the duties and interests of workhouse medical officers, especially Clause 10 and Sections 1 to 7. Sections 1, 2, and 3 provide that an alleged lunatic may be kept in a workhouse for fourteen days from its date by a certificate, containing the usual proviso, from the medical officer, and drawn according to Form 8 in the schedule. Section 4 provides that no person shall be detained in a workhouse as a lunatic for more than fourteen days, without an order under the hand of a justice of the peace having jurisdiction in the union where the workhouse is placed, which shall be drawn according to Form 9 in the schedule. The Council feel that this section will be found to be cumbrous and unworkable. Section 5 provides that the order is to be made on the application of the relieving officer, supported by a medical certificate according to Form 6 in the schedule under the hand of a duly qualified medical practitioner, *not being an officer of the workhouse*, and by the certificate under the hand of the medical officer of the workhouse drawn on Form 8 in the schedule. The Council holds that this is a gratuitous affront to and reflection on the medical officer, as he is to have the care and custody of the lunatic for fourteen days—it may be for more,—and then some medical man from outside is to step in, fill up the certificate, and be paid the fee, to the entire exclusion of the workhouse medical officer, who, in some workhouses, will sustain a very considerable diminution of the income he has hitherto derived from this source. Section 6 provides that when an alleged lunatic is in a workhouse, and the medical officer thereof has not signed such certificate as in this section is mentioned, or if at or before the expiration of fourteen days from the date of the certificate an order is not made under the hand of the justice for the detention of the lunatic in the workhouse, the medical officer shall give notice in writing to the relieving officer to take the requisite measures for the removal of the lunatic to an asylum; and by Section 7 it is decreed that, if he omits to give such notice, then for every day or part of a day he is in default he shall forfeit the sum of £10. It will be noticed that under the provisions of this clause every case, whether lunatic, idiot, or imbecile, now kept in the workhouse, must be notified by the medical officer, taken before a justice of the peace, and decided upon, not by the official, who knows all about him from daily observation, but by an absolute outsider, to the prejudice of the workhouse medical officer, and at an unnecessary cost to the guardians, who will be called on to pay a fee in each case; and as in many workhouses there are from 50 to 100 of such cases, the expense will be considerable. The Council feel that this Bill is framed in the harshest, most unjust, and most ungenerous spirit towards workhouse medical officers, and therefore earnestly calls on all such officers to use whatever influence they may possess to prevent this clause of the Bill from becoming law.

Signed on the part of the Council.

Joseph Rogers, Chairman,
May 6th, 1885. J. W. Barnes, Hon. Sec.

RUSSIAN OPINIONS ON ANTIPYRIN.

At a recent meeting of the St. Petersburg Medical Society, Dr. Grimm related a case of severe Erysipelas in which he used Antipyrin three times. The first time the remedy was successful and effected a cure in three hours; the second time no effect was produced; the third time, though nausea was produced, the cure was effectual. He gave a gramme three times hourly.—Dr. Barthel stated that in the clinical hospital generally five grammes were ordered (two, two, and one, at intervals of an hour), and with good results. Collapse had never been caused, and nausea but seldom; never vomiting or rigors on a rise of temperature.—Dr. Hinze confirmed this from his experience in a series of cases of erysipelas.—Dr. Moritz had used antipyrin largely both in the Clinical Hospital and in the Alexander Male Hospital. Besides typhus cases, where the remedy was not well borne, he had given it for three or four weeks in a case of acute joint rheumatism in which salicylic acid was useless; the quantity of antipyrin given was about four grammes per diem. The effects were prompt and satisfactory, reducing the fever with perspiration, without any nausea. It was worth remarking that intelligent patients observed that the taste of the remedy varied a good deal, so that the preparations were evidently not all alike. This might, perhaps, explain the different effects observed by Dr. Grimm in his case. Dr. Moritz had used antipyrin in pneumonia, but could not say that the course of this disease was shortened by its means.—Dr. Börling had seen antipyrin used in Strasburg in typhus and pneumonia, and had employed it himself in private practice with good results, especially in a case of abdominal typhus in a child of five years of age. The temperature fell after the first series of three doses (double as many grains as the child's age in years, so in this case ten grains). After the second series it fell to 36·5°, and remained for two days below 38°. As soon as it rose to 39° the antipyrin was again given. The illness lasted about three weeks. The child recovered. Dr. Börling generally gave the drug in syrup, and found children liked it in this way. —Dr. von Grünewald had used antipyrin often, but had several times seen vomiting produced.—Dr. Hüber confirmed Dr. Moritz's observation that antipyrin, like other antipyretic remedies, though capable of reducing temperature in a longer or shorter time, did not shorten the course of diseases.

OUR WAR CORRESPONDENT'S EXPERIENCES IN THE SOUDAN.

(Concluded from page 818.)

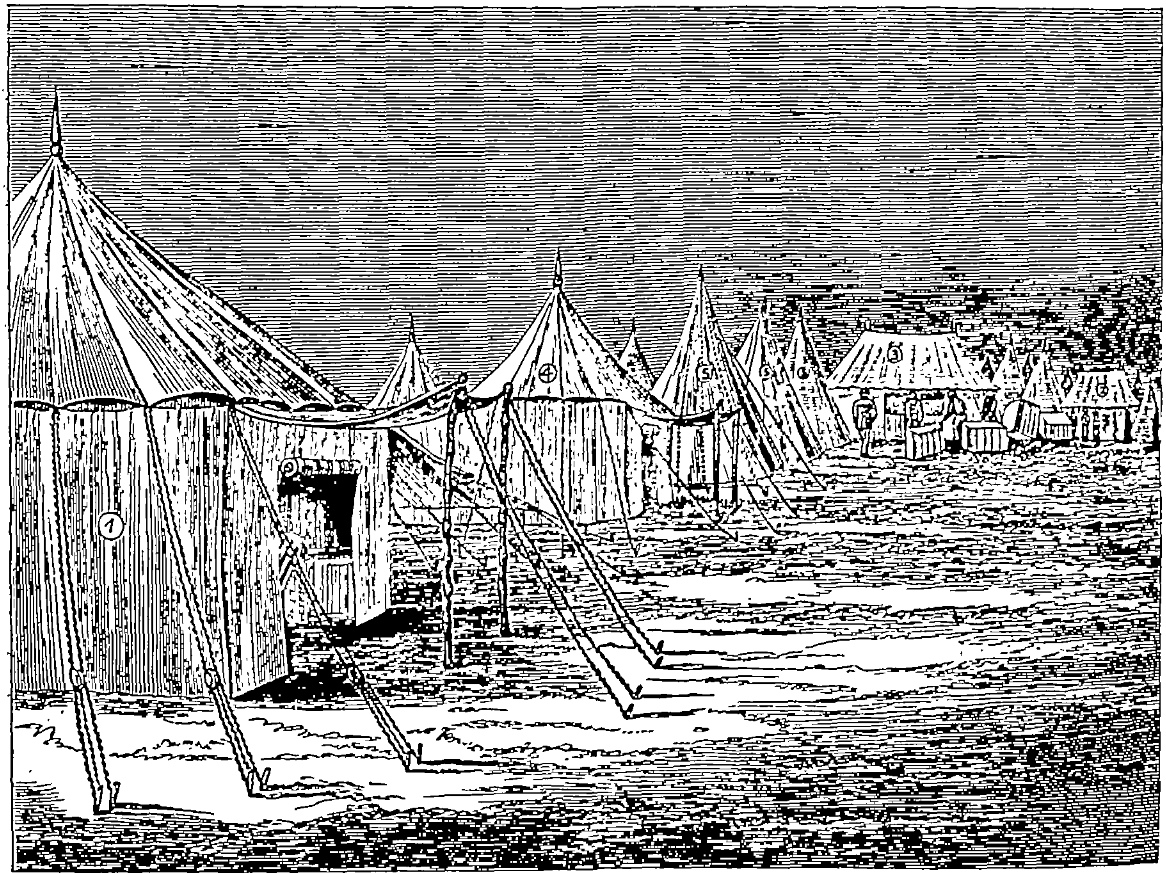
THE days a correspondent spends out in the Soudan are by no means dull. There are few hours, indeed, in which a man keen for inquiry cannot somehow or other find material in which to interest himself, or those on whose behalf he is acting. A visit to the town of Sawakin on one occasion—a sort of by-day—repaid me well for the trouble in doing so. It had been blowing strongly from the N.N.W. since daylight on the date in question, and raising such a dust-storm over the plain, camp, and shipping in harbour that everything a few yards distant was periodically quite hidden from view, and military movements had in consequence to be suspended for a time, whilst those who were on shore, and were unfortunate enough to be living in tents on the border of this extensive sand desert, had not only their nostrils, eyes, and ears filled with fine gritty particles of sand, but their hands were kept pretty busy in brushing off the yellow-coloured dust from articles of diet, as well as that quantity that had collected to the depth of half an inch or more on their bedsteads, their seats, accoutrements and saddles, and other tent belongings. To the poor sick and wounded this dust-storm proved irksome and distressing to a degree. Towards four o'clock, however, on the wind lessening in force and shifting more easterly, a subsidence of the disagreeables took place. People then could both see and breathe better than they could an hour earlier, and by five o'clock, with a little extra brushing up, matters had smoothed a bit and settled down to their normal condition.

Mr. Walter Truscott, the energetic representative of the *Pictorial World*, and myself, in company, determined to pay the Arabian quarters in the town of Sawakin a visit, and landing in the cool of the afternoon close to a large building now in the possession of and occupied by a number of our marines, we went in search of some of the lions of this town. Now, to judge by the numbers of friendly Arabs we met in passing from street to street (if these irregular and tortuous by-ways deserve such an appellation), as well as the unmolested character of our peregrinations, one could scarcely realise that at that very moment perhaps a desperate fight was being waged, and not very far off either, between our troops and these lithe-limbed fellows' kinsmen. Moreover, on passing from store to store, from stall to stall, and seeing the brisk business carried on by the squatting, cross-legged date-sellers, the jabbering fish-vendors, &c., it was evident to me that there were at least some sensible followers of Mahomet who did not up to the present believe in the glory of war, and that there was yet a remnant of the true believers of the Koran who, in fear and trembling of our powerful display of an armed force, had not deemed it desirable to quit their customary occupation and join their fathers, their brothers, or relatives in yonder plain. We observed two or three drinking dens, bearing French titles, "Hôtel de Ville," "Hôtel de Lesseps"; they were not sufficiently inviting, however, in their exterior to tempt us, so we did not enter them. On walking through a sort of main street lined on either side with rows of dirty-looking shops in which Arab merchants and dusky-coloured craftsmen were exposing their offensive-smelling fish and fly-covered merchandise and wares for sale, we arrived at a sort of square filled with human beings collected from every nation under heaven, and on the further side of which stood quite a handsome-looking edifice, built of quadrangular blocks hewn out of white coral brainstone (all the buildings and all the walls in this town are composed of this beautiful coralline substance), and which the bystanders asserted to be

OSMAN DIGNA'S TOWN HOUSE.

Of course Truscott would sketch the inside, whilst I determined to try my hand at the outside of the mansion—, that is to say, if the tenants now in possession of it would grant us permission, and let us enter to do so. So, wending our way through the motley ill-conditioned crowd, we arrived opposite the solidly built double front door, one-half of which happening fortunately to be just open, we cautiously peeped in, intending to beat a hasty retreat if circumstances necessitated our doing so, and saw at once that the badly lighted room was occupied by some four or five elderly Arabs, disposed variously round the apartment. One of them, by far the youngest of the party, clad in a sort of white linen vestment, on his knees and bowing his head repeatedly to the ground, was evidently in a posture of religious supplication,—no doubt fervently imploring the favour and assistance of Allah against us all as the unwarrantable intruders upon and the spoilers of their land. Waiting a minute or two for him to rise from the posture of devotion, we advanced a step, and with one foot on the door-sill salaamed as well and decorously as we could in the ordinary mode of Eastern salutation—of course having practised it somewhat beforehand,—and to our great surprise and unspeakable delight were not only welcomed inside, but offered an inspection of the whole of this dwelling. Beyond the basement hall (the upper and other rooms being cramped and small), there was little to note or write about; so on returning to Osman Digna's reception-chamber, Truscott up with his sketching stool, out with his block, and commenced operations forthwith. I took up a position just in rear of my colleague, with a view to notice what the Arabs were about, and see how they would act under this palpable breach of etiquette on our parts, as well as to throw in a suggestion or give him an artistic hint now and then as the process of his sketching went along. The knight of the pencil had not, however, been long at his work before our religious friend threw off some of his reserve, came boldly up to our side, and when he saw what was being done by Truscott actually smiled—by Jove! it is not often that an Arab smiles,—and after muttering some unintelligible words to his friends squatting and conversing together on the other side of the room, he proceeded to open a cupboard in the wall and withdrew therefrom vestments of the most elaborate as well as costly description. Divesting himself of his toga alba he quickly assumed another of a widely different character both as to colour and textile condition. First of all came a light azure-blue-coloured and flowing satin skirt; and, gathering in its ample folds, he next encircled his slight waist with a cream-coloured girdle of twisted silk; then over his sloping shoulders, carelessly, still very artistically, was thrown a bright-golden-coloured ribbed-silk shawl from which hung fringe of the same quality at least six inches deep. After this appeared on his head a huge turban of rich yellow and maroon silk, and then, with a glance in a small hand-mirror which he held and a twist or two of his jet black moustache, he finished his get-up, evidently much to his own as well as to his companions' satisfaction. Truscott stopped work to look in astonishment at this modern example of an Arabian Nights transformation, whilst I was equally lost in *amazement* at the wonderful change that had come over the religious devotee since the first moments of our self-forced introduction.

H REDOUBT AND BASE HOSPITAL.



1. Dr. Trotter's tent. 2. Hospital stores tent. 3. Operating tent. 4. Medical officers' tent. 5, 5, 5. Tents of orderlies and attendants.

Subsequently it transpired we had (quite by accident) hit upon the day of the sheikh's "at home," as several elderly white-headed old patriarchs called upon him during the afternoon of our visit, giving him most deferential bows on entry, and receiving from him in turn that *bonhomie* courtesy which alone is the outcome of position, patronage, and power. A question now naturally arose betwixt us,

"WHO IS HE,

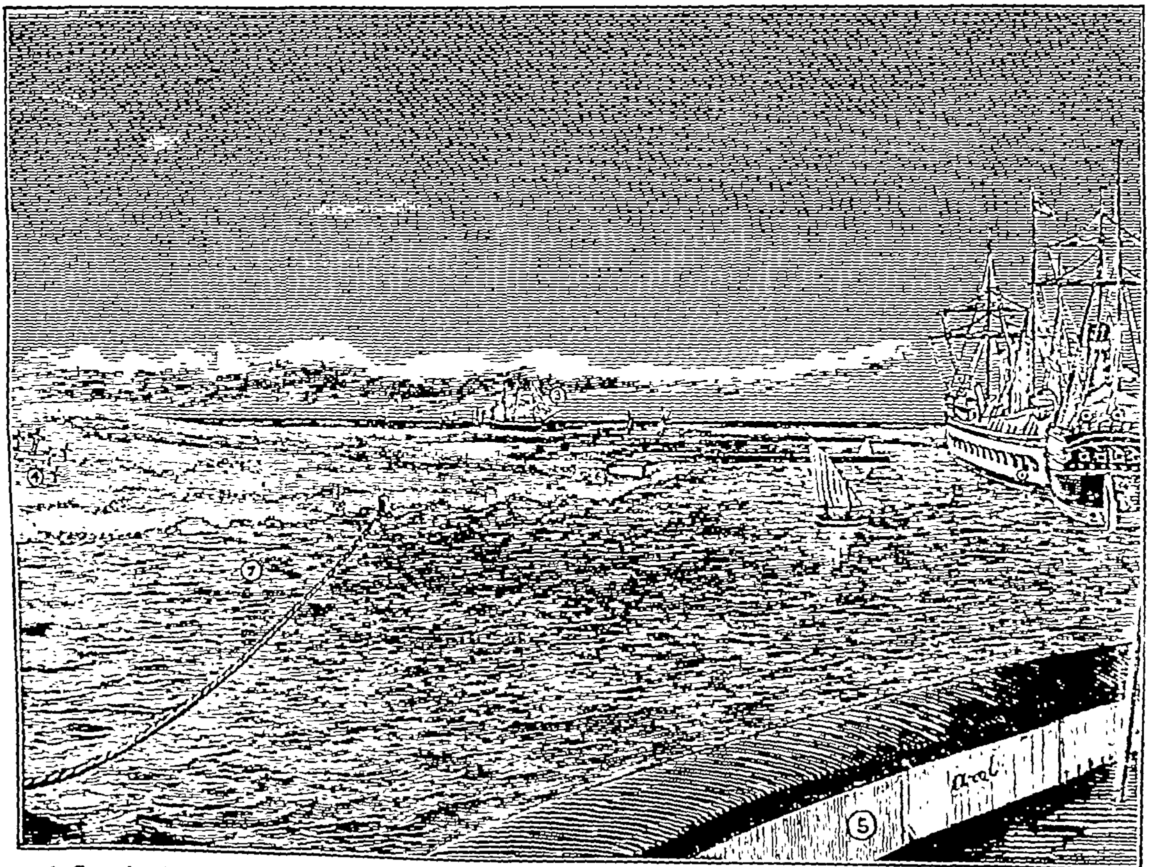
as a respected tenant in this Osman Digna's house?" "Is he a brother, is he a cousin, or in what relationship, if any, does he stand to that Mahdi's lieutenant, who has so long and so pluckily defied the British arms and power?" How we longed to know how and by what means the present holder had been permitted to remain in occupation of this domicile! But any further surmises on our part were suddenly cut short by the introduction of coffee, which, in small chased silver cups, was handed round by an attendant to all present. On the same being presented to me I incautiously proceeded to tip the Nubian slavey, and received a well-merited rebuke from mine host for my thoughtlessness and want of manners on this occasion. With some degree of diffidence I brought the tiny metallic receptacle to my parched lips. I was very thirsty at the time, and swallowed an ounce or two of the strongest infusion of Mocha I ever tasted in my life; and although the dictates of conventionalism amongst the Arabs forbid a guest to reject proffers of edibles or drinkables not actually forbidden by their religious tenets, I think I must have refused a second edition of the coffee—"thick stuff" Truscott called it—if brought round again, and was very glad to find there was no repetition of the courtesy. I was wearing at the time a brown leather cross-belt, to which was attached a cartouch-box for carrying a small surgical case in. To-day within it there happened to be a consignment of cigars. A thought struck me. I'll offer my guest one of them. So, bringing the box round from my back, I was in the act of undoing it for the purpose of extracting a veritable "Henry Clay," when I saw a look of consternation on the face of my host and his other native guests. I grasped the situation in a moment. They thought I carried firearms, and was going to use the same against them. It took but a moment to undeceive them, for in a second or two afterwards a cigar was out from where a cartridge was expected to issue, and presented with due formality to His Excellency, while I explained to him at the same time that I was not a fighting man. My business out in the Soudan, and amongst his people, partook more of a pacific than a fighting character, and my desire was for peace rather than war. I assured him I had never lifted hand or weapon against him or his people, and, more than that, I trusted I never should. This explanation gave him confidence, and the fear formerly depicted on the countenance of my host was speedily changed to a look of astonishment, whilst a considerable amount of amusement was created amongst the guests present by the *dénouement* to which my cigar-case had so unexpectedly given rise to. He gracefully declined my offer, saying he never smoked; but from that moment I was always a welcome guest at the house. I should scarcely deem the above incident worth recording were it not for

WHAT CAME OF IT AFTERWARDS.

Two or three days elapsed before I again paid the town a visit; when I did so I called in to see my sheikh friend, and was welcomed more cordially than before. Presently an elderly Arab entered and commenced a very animated conversation with mine host. I listened—who will blame me for doing so?—and through possessing a slight knowledge of Persian and Arabic, gained during my studies in the Hindustani language, and from carefully watching the manual demonstrations by the informant, putting this fragment and that fragment of conversation together, I was enabled to gather that not only had something unusual happened amongst their Arab forces, but, if I mistook not his meaning, a sad fatality had overtaken the Amara and Samara tribes by some fatal blunder—i.e., they had been mistaken, it appeared, in the smoke for English soldiers, and by getting between the fire of our troops and the riflemen on Osman Digna's side had lost nearly a thousand of their number by their stupidity and blundering. This was indeed a most welcome "find" for me. A thought at once struck me: "That old fellow knows more than he has told; I'll try to get hold of him for further information." With this idea in view I set to work, and within a few hours he was attendant on me in one of Messrs. Lucas and Aird's tents, and a willing agent in my service into the bargain. I proceed to give the dialogue *verbatim* as it occurred between us in the presence of one of the ablest interpreters attached to the British camp.

ENTRANCE OF SAWAKIN HARBOUR.

(*Sketched from the deck of the steam transport ship "Arab."*)



1. *Ganges* hospital ship.
2. R.I. steam transport ship *Bulimba*, Captain Clark, R.N.R.
3. H.M. gunboat lying at entrance of harbour.
4. Old burial-ground, where the late Lt. Dallston, of the Guards, lies.
5. Rail and bulwarks of *Arab*.
6. Henhouse of *Ganges*.
7. Showing shallowness of water over coral formation.

Q. What is your name? *A.* Al-Abed.—*Q.* What countryman are you? *A.* Arab by birth.—*Q.* Where do you live? *A.* Principally at Jeddah.—*Q.* How is it that you are here in Sawakin? *A.* I am a travelling merchant sheikh, and have been so for a number of years.—*Q.* Do you know Osman Digna? *A.* I do, very well indeed.—*Q.* Now, are you friendly with the English? *A.* Yes, quite so; I do not think the English will do me any harm.—*Q.* How is it that Osman Digna and your brethren in arms do not think so too, and come in and be making money by working on the rail as the friendly disposed are doing? *A.* Because they are silly men, and do not know better.—*Q.* Now tell me, have you heard that any of Osman Digna's troops have been killed through an accident? *A.* I do know it to be perfectly true that several hundred men of the Amara and Samara tribes were shot by getting in between the fire of the English and our men.—*Q.* Is there any dissatisfaction amongst Osman Digna's party? *A.* Yes, there is considerable disapproval amongst them at being forced to fight outside when many of their friends are staying inside the town not fighting, and earning plenty of rupees by so doing.—*Q.* What is your opinion about Osman Digna's surrendering himself to the British, and upon what terms? *A.* On account of the many people leaving him, I think it highly probable Osman Digna would surrender himself on certain terms being granted him.—*Q.* Give me your ideas of his terms, and I will see what can be done for you. *A.* First, the lives of himself and all followers must be spared; secondly, that he on surrender be treated as a patriot, not as a rebel, and *with no less consideration than Arabi was;* thirdly, that work be found on the railway for the people when they do come in and lay down their arms.—*Q.* Could you carry to, and bring back a letter from, Osman Digna? *A.* No, not myself, I am too old for the journey; but I can get a man to do it, if the General will grant a pass through the British lines, and the messenger is paid for going. — *Q.* Where is Osman? *A.* I cannot tell you. It would cost me my life.

And with this our interview terminated. Then getting the principal items of our conversation jotted down and signed by the interpreter present as a witness to its veracity, I posted off with it to the tent of General Ewart at the base, who took such a well-disposed interest in the matter that he at once despatched me in company with his aide-de-camp to head-quarters, so that the officer in charge of the Intelligence Department should be made aware of the facts without a moment's delay. What transpired between myself and Major Grover for the purposes of this paper need not be known; but the public may rest assured that no stone has yet been, nor ever will be, left unturned to bring about a pacific as well as an honourable termination of this most calamitous campaign. This happened on Saturday, March 21st. Sunday followed with all its train of distressing and disastrous events. Who knows by the sparing of our troops from that Sunday's march out what might by God's mercy have been brought about? I never saw my sheikh friend again; so turning my thoughts from our friendly Arabs (for there are many such) and casting my eyes plainward, what a ghastly sickening spectacle of war lies there! Upwards of twenty heaps, each one containing about a hundred carcases of human beings just ready for burial or cremation, as the urgency of the circumstances may demand. On beholding such an unnatural exhibition, what is the exclamation that escapes the lips of every officer and every man you meet with out there?—Horrible! And is it not also asked everywhere you go—

FOR WHAT PURPOSE IS ALL THIS EXPENDITURE OF HUMAN LIFE?

Ah! we may well ask ourselves that question. All to whom I have spoken on this subject feel that whilst brave and heroic Gordon lived, while there remained the remotest possibility of rescuing the devoted garrison under his command, there was at least an excuse, and a very just excuse too, for saving them all, even at the expense of the most daring chivalry the bravest and best army England could command; but now he has gone, died a hero's death, and his fondly attached followers all been either butchered or scattered to the four winds of heaven, surely the cause has virtually ceased to exist, precious time having been wasted, and the opportunity been lost—ay, for ever and ever—for doing any more than sacrificing men and treasure in this sickly sun-scorched land. As I, in the painful execution of that duty imposed upon me, look upon the heart-rending scenes of carnage and bloodshed strewn around, as I see the bodies of those poor fellows, with their arms, legs, and heads pointing in all directions, lying huddled together in putrescent heaps, as I think of the hundreds made widows, and the thousands rendered fatherless, or contemplate the scores of friends and relatives who will never welcome back the return, or see the kind face of a brave husband, father, or loving friend again; as I see the seething and devouring flames wrapping round, one after another, the poor, yet after all perhaps the happiest of happy homes, of these poor barbarians, and as I view the smoke of that desolation circling and curling upward to the sky,—I can but think that if there be a God in heaven he will surely bring some to book who have been foremost in fomenting and urging on this most unholy of wars. I turn from this spectacle homeward, and arriving once more at the Base Hospital, my attention is called by the surgeon in charge to a very interesting case, indeed, it being that of

A POOR ARAB LAD SHOT THROUGH BOTH THIGHS.

On my entry into the hospital tent he was observed lying on his left side, and certainly appeared not more than thirteen, or at most fourteen, years of age. He is recognised as one of the brave leaders who made a most plucky and determined attack on our lines, for, with nothing but a banner in hand, he rushed on our ranks, utterly regardless of life or the consequences, until he was brought to earth, being shot through both legs by one of our marksmen. With the same determination, however, and the same patience as he exhibited during the fight, in the presence of his captors he bore his pain and sufferings now, and they must have been excruciating at times. Although the bullet had penetrated and passed through the fleshy part at the juncture of the middle and upper thirds of both limbs, I never even heard him moan; not a cry, not a groan, ever escaped his parched and swollen lips, and there was little to tell, beyond the visible application of a quantity of antiseptic dressing wrapped round the limbs, that he had ever been wounded at all. Poor fellow, he lay so quiet—never moving, save to brush away occasionally some irritating fly that had settled on his fever-heated brow; but never would he let it be known that he felt pain, or that he suffered any inconvenience whatever from the active and plucky show he had made in yonder fight. Now and then he would try to, and did, remove the dressings and bandages from his extremities, and it kept the nursing staff pretty busy preventing him from oftener repeating the offence.

I think in my last letter I spoke of the ship *Ganges* being suitably painted white; why I did so is because most of the transports are painted of a slate-grey colour, for what purpose I am at a loss to conjecture, when, for all purposes of health or mitigating the effects of heat, these vessels might as well have been clothed in a darker colour. From experiments made by myself and others, most carefully conducted by a naval officer some time ago in Bombay dockyard, it appears that a very great mistake is made in coating ships of a hue anything approaching an ash-grey tint.

I append the results of these experiments to prove the accuracy of my statements, with the view that some interest may be awakened in those who are responsible for the transport arrangements, and have the interest as well as the health of our soldiers and sailors at heart.

My experiences in the Soudan are now drawing to a close, as having been offered by the Principal Medical Officer at the base, and accepted, a charge, in conjunction with another medical officer, of some sick and wounded bound to Suez, I proceed on board the *Deccan* to take up my duties before night has finally closed in.

Already one of my rough sketches—that of the battle fought at McNeill's Zereba on the 22nd ult.—has been kindly accepted by the proprietors of the *Illustrated London News*, and appeared in the front page of that famous weekly. In the pages of THE LANCET to-day appear copies of two others, one showing the entrance proper to Sawakin harbour, with the *Ganges* and *Bulimba* lying at their moorings, and burial-ground, and sketched from the deck of the *Arab*, on board of which vessel I was most courteously supplied with quarters by Captain Fellows, R.N.; the other representing the tents of the Base Hospital, particularly that belonging to Surgeon-Major Trotter, shown in the foreground, to whom I am indebted for much valuable information during my stay at Sawakin and the front.

EXPERIMENTS.

No. 1. Made on March 18th, about 2 P.M.; temperature in the shade at the time being 85° F. The bulb of a thermometer was held against the side of the naval transport Union Co.'s ship *Arab;* the thermometer during the experiment being screened from the sun by a handkerchief.

Result.

Temp. of air in shade	85° F.
„ „ against black part of iron hull	113°
„ „ against a portion painted white ...	104°
„ „ against a portion painted lead-colour	112°

No. 2. In a wooden box, painted black, a thermometer was introduced, and also into another painted white (both left standing for one hour in the sun). The result was as follows:

1. Black ... ... 117° F. | 2. White ... ... 102° F.

No. 3. Six thermometers I hung up in the sun, having two parts of new bunting of different colours wrapped round the bulbs and lower ends of each thermometer (also exposed to the sun for one hour).

Result.

Temp. of the air in shade	91° F.
„ 1st thermom. cov. with 2 parts of white ...	106°
„ „ „ „ yellow ...	109½°
„ „ „ „ red ...	110°
„ „ „ „ blue ...	114°
„ „ „ „ light-blue	115°
„ „ „ „ black ...	117°

This experiment shows the advantage of light-coloured clothing and awnings in the tropics. Having no lead-coloured bunting, I was unable to test results with this.

No. 4. Procured ten tin biscuit-boxes, and painted them variously as under. *Into each one was introduced* a thermometer, which was simply left standing up in the boxes on the side opposite that exposed to the sun. Time, 3 P.M. Temperature of external air in the shade, 88° F.

1. White	100° F.	6. French-grey...	106½° F.
2. Yellow	103½°	7. Lead-colour ...	109°
3. Red	104°	8. Dark-green ...	110½°
4. Stone-colour ...	102½°	9. Light-green ...	109°
5. Blue	106°	10. Black	114°

N.B. These tin biscuit-boxes were closed, and left standing in the sun for about two hours.

No. 5. Three square tin biscuit-boxes were next painted and whitewashed variously, to test the relative merits of same.

Results.

A*a*.	Painted white, and exposed to the full rays of the sun	100° F.
	Painted French-grey, and exposed to the full rays of the sun	111°
	Painted dark-grey, and exposed to the full rays of the sun	112°
A.	Painted with one coating of grey over white	108°
	Painted with two coatings of grey over white	116°
	Painted white, and exposed to the sun ...	100°
	Whitewashed	98½°
B.	Biscuit-box, painted French-grey	111°
	Over this paint one coating of whitewash applied	102°
	With two coatings of whitewash	96°
C.	Biscuit-box, painted lead-colour	112°
	Over this paint one coating of whitewash applied	103°
	With two coatings of whitewash	97°.

The results of these experiments go far to prove the vast superiority of white to *grey* as regards coolness for coating anything that is subject to exposure to the sun in the tropics, and would also lead to the inference that white, if allowed to become dirty or grey-like, would thereby be rendered much less cool than it originally was when in a cleanly condition. Moreover, the results of experiments carefully and patiently made by Staff Commander Pounds, R.N., of Malta Dockyard, go very far to corroborate in every respect those of my own.

Erratum.—In our correspondent's letter published last week, an important typographical error escaped correction. Each of the officers' hospital tents is there stated to have contained "eighty" beds. The number should, of course, have been eight.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Poplar.—In the last monthly report issued as to the Board of Works for the Poplar District, reference is made to the visit of Dr. de Chaumont, on behalf of the Local Government Board, in connexion with precautions which may be necessary as to cholera. From what is said, it would appear that the central authority are advising all port and riparian authorities to be provided beforehand with means for isolating cases of that disease; and that it has been laid down as desirable that cholera cases should not be subjected to a journey of more than a mile when isolation is intended. For the metropolis this would mean the establishment of a large number of hospitals; but, having regard to the symptoms of cholera and their rapid progress, we believe the limit of one mile to be a wise one; and should the disease appear in our midst we hope the requisite number of temporary hospitals will be forthcoming.

Huddersfield (Urban).—A report issued by Dr. Cameron shows that the death-rate in Huddersfield during the thirteen weeks ending April 4th was equal to 22·4 per 1000, of which 2·0 was due to the principal zymotic diseases. Both those rates were slightly below the mean rates during the same period in the twenty-eight English towns, although they somewhat exceeded the low rates that prevailed in Huddersfield in the first quarter of 1884. The deaths last quarter included 36 from measles; and Dr. Cameron points out that little can be done to check the spread of this disease until it is added to the list of diseases to be notified to the sanitary authority. It is pointed out, moreover, that 4 deaths were referred to typhoid fever, and that 19 "supposed" cases of this disease were notified during the quarter, suggesting the probability of another outbreak of this disease next autumn unless preventive measures are vigorously enforced. Infant mortality in Huddersfield last quarter exceeded the average rate in the twenty-eight towns, owing in great measure to the epidemic prevalence of measles.

Stretford (Urban).—The report upon the sanitary condition of this suburban district of Manchester during 1884 states that the birth-rate and death-rate were equal to 27·5 and 17·3 per 1000 respectively. The estimate of population upon which these rates are calculated is, however, omitted, which materially detracts from the value of the rates. The population of this district increased from 11,945 in 1871 to 19,018 in 1881, and Mr. Pettinger appears to have estimated the population in 1884 at 20,000. This is considerably below what the estimate would be if based upon the rate of increase between 1871 and 1881. The death-rate given (17·3) exceeds that recorded in recent years, and no account appears to be taken of the deaths of residents recorded in public institutions situated outside the district. With regard to child mortality, we are told that the deaths included 139 children under five years, "showing a death-rate of 6·95 children under five years of age." It may be presumed that this means that the deaths under five years were equal to 6·95 per 1000 of the population at all ages. Such a rate is utterly valueless as a test of child mortality, which can only be measured by the proportion of deaths of children to the number of children living at the same ages. We are not told that the deaths of infants under one year were equal to 144 per 1000 of the children born, which is a trustworthy test, and shows for such a district as Stretford a remarkably high rate of infant mortality. The zymotic death-rate is given as 1·9 per 1000, and was mainly due to 9 deaths from scarlet fever and 24 from diarrhœa. Bearing in mind the suburban character of the population, and its large quota of domestic servants, the sanitary condition of the district, in spite of a comparatively low death-rate, cannot be considered satisfactory.

New Windsor (Urban).—Dr. Casey is able to report very favourably of the health of this municipal borough during 1884, the death-rate having been but 13·3 per 1000, which is satisfactorily low, even after due allowance for the abnormal character of the population, including as it does a large proportion of soldiers. The population of the borough is estimated (evidently on the basis of the rate of increase between 1871 and 1881) at 12,441. The birth-rate was not more than 26·8, influenced, as was the death-rate, by the number of soldiers and of domestic servants in the population. The deaths, including those in the union workhouse, and excluding those of *non-residents in* the Royal Infirmary, were fewer than in any recent year, and were 74 below the number that would have occurred had the rate in the borough been equal to the mean rate in the whole of England and Wales. Two exceedingly favourable features in this report are: (1) the low rate of infant mortality, which was only 72 per 1000, and less than half the general rate; and (2) the low zymotic death-rate, which did not exceed 0·88 per 1000. The statistical part of the report, especially that which gives the rate of mortality during the past five years at each of four groups of ages, is highly commendable, and corroborates the satisfactory evidence of the low death-rate at all ages. Two unfavourable features in the report should, however, be noted. It is stated that no means exist in the borough for the isolation of cases of infectious disease, which, in view of the four cases of small-pox that occurred last year, cannot be considered satisfactory. It appears, moreover, that the town, especially in the older parts, abounds with "dangerously polluted wells." The favourable mortality statistics of last year should not depreciate the value of the warning implied by Dr. Casey in pointing out these defects in the sanitary condition of the Royal borough.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5792 births and 3601 deaths were registered during the week ending the 2nd inst. The annual death-rate in these towns, which in the preceding two weeks had been 23·2 and 23·4 per 1000, declined last week to 21·1. During the first four weeks of the current quarter the death-rate in these towns averaged 23·2 per 1000, against 23·9 in the corresponding periods of the nine years 1876–84. The lowest rates in these towns last week were 15·1 in Hull, 15·1 in Derby, 15·2 in Bolton, and 15·9 in Brighton. In the other towns the rates ranged upwards to 30·1 in Blackburn, 30·6 in Manchester, 32·7 in Preston, and 34·4 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had steadily increased in the preceding nine weeks from 377 to 529, declined last week to 449; of these, 176 resulted from measles, 127 from whooping-cough, 36 from small-pox, 33 from scarlet fever, 30 from diarrhœa, 20 from diphtheria, and 22 from "fever," principally enteric. The lowest death-rates last week from these diseases were recorded in Brighton and Derby, and the highest in Sunderland, Cardiff, and Newcastle-upon-Tyne. Measles caused the highest proportional fatality in Sunderland, Liverpool, Manchester, and Cardiff; whooping-cough in Blackburn, Cardiff, and Preston; scarlet fever in Preston, Newcastle-upon-Tyne, and Sunderland; and "fever" in Norwich and Leicester. Of the 25 deaths from diphtheria in the twenty-eight towns 15 occurred in London, 3 in Bristol, 2 in Portsmouth, and 2 in Liverpool. Small-pox caused 66 deaths in London and its outer ring of suburban districts, 2 in Manchester, 1 in Liverpool, and 1 in Halifax. The number of small-pox patients in the metropolitan asylums hospitals, which had been 1062 and 1034 at the end of the preceding two weeks, rose to 1282 on Saturday last; the admissions, which in the previous two weeks had been 307 and 246, rose to 354 last week, and exceeded the number in any week since June last. The Highgate Small-pox Hospital contained 87 patients on Saturday last, 20 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding three weeks from 512 to 381, further fell last week to 337, and were 59 below the corrected weekly average. The causes of 91, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Plymouth, Nottingham, and in three smaller towns. The largest proportions of uncertified deaths were recorded in Hull, Halifax, Salford, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which in the preceding four weeks had declined from 25·0 to 22·7 per 1000, further fell to 22·4 in the week ending the 2nd inst., but exceeded by 1·2 per 1000 the mean rate during the same period in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·4 in Leith and 15·2 in Aberdeen, to 27·5 in Glasgow and 30·8 in Paisley. The 546 deaths in the eight towns included 27 which resulted from whooping-cough, 14 from measles, 9 from diarrhœa, 7 from scarlet fever, 4 from "fever" (typhus, enteric, or simple), 3 from diphtheria, and not one from small-pox; in all, 64 deaths were referred to these principal zymotic diseases, against 76 and 81 in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which corresponded with the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 17, 23, and 30 in the preceding three weeks, declined last week to 27, and included 15 in Glasgow, 3 in Edinburgh, 3 in Paisley, and 3 in Perth. The 14 deaths referred to measles showed a further decline from recent weekly numbers, and were all recorded in Glasgow. The fatal cases of scarlet fever, which had been 7 and 4 in the previous two weeks, rose again to 7 last week; 3 occurred in Edinburgh, 2 in Glasgow, and 2 in Paisley. The 4 deaths from "fever" were fewer than those recorded in any recent week, and included 2 in Edinburgh. Of the 3 fatal cases of diphtheria 2 were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 131 and 118 in the previous two weeks, were 124 last week, and exceeded by 8 the number returned in the corresponding week of last year. The causes of 78, or more than 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had risen in the preceding three weeks from 32·2 to 34·0 per 1000, declined to 33·5 in the week ending the 2nd inst. During the first four weeks of the current quarter the death-rate in the city averaged 33·4 per 1000, the rate during the same period not exceeding 21·9 in London and 18·8 in Edinburgh. The 227 deaths in Dublin last week were within 3 of the number in the preceding week, and included 40 which resulted from the principal zymotic diseases, against 29 and 28 in the previous two weeks; 17 were referred to measles, 9 to "fever" (typhus, enteric, or simple), 5 to scarlet fever, 5 to diarrhœa, 4 to whooping-cough, and not one either to small-pox or diphtheria. These 40 deaths were equal to an annual rate of 5·9 per 1000, the rate from the same diseases not exceeding 2·9 in London and 1·7 in Edinburgh. The deaths referred to measles, which had been 15 in each of the preceding two weeks, rose to 17 last week. The fatal cases of "fever" showed an increase of 5 upon the number in the previous week, and exceeded those recorded in any week since the end of January last. The deaths from scarlet fever, whooping-cough, and diarrhœa also exceeded those returned in recent weeks. Five inquest cases and 5 deaths from violence were registered, and 64 deaths occurred in public institutions. The deaths of infants showed a further increase, while those of elderly persons showed a slight further decline from those returned in recent weeks. The causes of 35, or more than 15 per cent., of the deaths registered during the week were not certified.

Correspondence.

"Audi alteram partem."

THE CUSTODY OF LUNATICS.

To the Editor of THE LANCET.

SIR,—In your annotation last week on this subject your advice to the medical officers of workhouses is "Let the authorities get out of the difficulty as best they may." Does this advice imply that the medical officers are not to deal with the lunatics placed under their charge? If so, such advice is impossible to be followed, as the medical officer seems to me to be obliged to give a certificate on the request of the master or relieving officer as to the state of a patient's mind and the advisability of letting a supposed lunatic go free. Should any damages be assessed to the medical officer from illegal detention on such a certificate, the parish will have to pay such damages, and such a custom has been followed in all the cases that have come to my knowledge. There is no reason, therefore, at present why workhouse medical officers should depart from their usual routine. I cannot admit the truth of the next sentence, where it stamps as a mischievous practice the sending of suspected lunatics to workhouses, or "that a workhouse is not the place for such cases," or "that a prison is better." Your solution "of the difficulty is to provide reception and probation wards in connexion with the public asylums for lunatics."

Now, as regards our large urban workhouses, most of which possess a staff of trained nurses, responsible male officers, resident medical officers, and suitable wards, why cannot wandering lunatics be attended there temporarily just as well as in asylums? They cannot be attended there permanently so well as at asylums, only because workhouses are in the crowded towns, and it is necessary for the welfare of the insane that they should live in the country. How the bridewells can be better than the workhouses I would like to know. In the bridewells there are neither nurses nor resident medical officers, nor suitable wards. The "prisons" have hospitals, but patients cannot be sent to prisons at midnight. If you provide suitable wards at all the bridewells, with resident medical officers and nurses, then the patients may be treated as well as in the lunatic wards of a workhouse; but I fail to see how they can be treated better. But this would be an unnecessary innovation, and, consequently, an unnecessary expense. It must be remembered that most of these suspected lunatics have to be dealt with in the night-time, and in the majority action must be taken at once—i.e., the patient must be taken into custody at once. You say these should be sent to probation wards in connexion with the large asylums. We will see how this would work in the parish of Liverpool. During last year 355 suspected lunatics were admitted into the lunatic wards of the Liverpool Workhouse. That is, according to your plan, that every twenty-four hours a magistrate would have to be looked for, and a journey of from ten to sixty miles or more made to Rainhill, Whittingham, Lancaster, or Prestwich Asylum, according as each place could or could not afford accommodation at the time. Under the present system, however, 152 only required to be removed to asylums, 203 recovering in a few days, and discharged to town, or taken charge of by friends, or sent into the workhouse as destitute. Many of these 203 went back to their work without any "insane" stigma upon them. They were looked upon as being "off it" for the time, through drink, grief, anxiety, or any of the other causes of temporary insanity that are rife in a large city. There is no stigma amongst the poor so hard to shake off as having once been in an asylum. No one will employ quondam lunatics; but if they have only been in the workhouse hospital a few days no such stigma attaches to them. It is true, that the workhouse stigma may be altogether eliminated by having a special hospital for such cases, but that would only be a change of name. Nor would it be necessary, as the great majority of these cases are destitute, and belong to the class cared for by guardians. The 152 are now pauper lunatics, 79 of the others were discharged to the workhouse. Some of the remaining 124 had friends who when communicated with by the parish authorities came forward and took charge of them, defraying expenses; but the majority of these, had they continued insane, would have become chargeable to the parish. Why, therefore, should another authority be constituted to deal with cases that from the nature of things will have eventually to be handed over to the present authority to support and look after?

It is only amongst those temporarily or permanently destitute that any trouble will arise. The better classes can procure assistance at any hour of the day or night to prevent their insane relatives from injuring themselves or others pending the preparation of the necessary forms and the arrival of a convenient time for allowing their removal to an asylum. But the poor cannot do this, and their insane relatives must be taken off their hands promptly. By the method practised in Liverpool this has been done for years, with the greatest possible advantage to all concerned. I sincerely trust the Local Government Board will legalise beyond all doubt such a system as has been used with us, as it will prove the most workable and most beneficent to the poor creatures concerned of any that has yet been proposed. It will provide for such cases when found half naked and dangerous in the streets, the bridewells, or in the homes of the poor. To take away this provision because relieving officers have in isolated instances removed respectable and harmless lunatics from comfortable homes is unnecessary, and very like yielding to panic on the part of the authorities. Any argument derived from some workhouses not having sufficient proper accommodation or attendance woule be met by insisting on suitable accommodation and attendance being provided in such places.

I am, Sir, yours truly,
WM. ALEXANDER, F.R.C.S.,
Visiting Surgeon, Liverpool Workhouse Hospital.
Liverpool, May 4th, 1885.

⁂ We do not suggest that medical officers should do less than their duty. All we desire to urge is that they should not do more. By all means sign certificates, but leave to the authorities the discovery of a way out of the difficulty which the absurd arrangements at present in force have created.—ED. L.

METROPOLITAN ASYLUMS BOARD.

To the Editor of THE LANCET.

SIR,—On Jan. 12th last I paid an independent and totally unexpected visit to the Darenth Small-pox Camps, and the general result of my inspection appeared in your journal on the 17th of that month. That the scale of diet, clothing, &c., was not illiberal was perhaps all too plain; indeed, the condition of the unfortunate inmates of that convalescent hospital was nearer akin to that of luxury than the opposite. The revelations now taking place with regard to the Homerton hospitals are still more striking, and prove, with the evidence of my own visit to that at Darenth, the absolute necessity of the speedy appointment of a thoroughly competent inspector or superintendent-general of all the institutions under the management of the Asylums Board. I therefore offer no apology for inviting the aid of your powerful pen in urging such a measure. At present each medical superintendent appears entirely free, and at liberty to tax the public purse to any extent his professional whims and fancies may suggest. What appears to me to be required is a firm and capable head, with full powers, but acting in concert with, and to some extent in subordination to, the responsible and able medical advisers of the Local Government Board, to organise a more or less uniform system with regard to the food, clothing, hospital comforts, and necessaries, and all the other details of the Asylums' *régime*. The idea, in all its fulness, will, I am sure, be at once clear and commendable to you, and therefore its further developmint appears to me quite unnecessary.

I am, Sir, yours truly,
JOHN INCE, M.D.,
H. M.'s Indian Medical Service (retired list).
Farningham, May 5th, 1885.

THE LATE DR. TIBBITS OF BRADFORD.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me, through your columns, to appeal for help for the widow and nine children of the late Dr. Tibbits, physician to the Bradford Infirmary.

A rapidly fatal attack of pneumonia put an end to his valuable life on April 14th, before he had had any opportunity to lay by money for his very large family of young children. All the property, inclusive of books and furniture, which he left behind, when realised and invested safely at 3½ per cent., is calculated not to produce more than £20 per year. His friends and medical brethren are raising a fund for the maintenance of his widow and children. If my letter should meet the eye of any of his old college friends who were contemporaries of his at University College, I think they may be induced to lend a helping hand. The case is truly necessitous and deserving. For ten years he laboured and maintained his large family without private income of any moment beyond that which he derived from physician's practice. The little capital he possessed on first starting consulting practice was trenched upon year by year to maintain his family, and just as this little store was approaching exhaustion, and just as success in practice was beginning to come, his life was suddenly brought to its close. Any contributions will be thankfully received by me or by Mr. Wm. Maw, the Secretary to the Bradford Infirmary.

I am, Sir, yours very truly,
J. APPLEYARD, F.R.C.S. & M.B. Lond.
1, Clifton Villas, Manningham, Bradford, Yorks, April 29th, 1885.

ROYAL COLLEGE OF PHYSICIANS.

To the Editor of THE LANCET.

SIR,—The number of Fellows elected last Thursday, though twenty for the double year, does not reach your proposed annual average of fourteen or fifteen; and as the selection for the last three or four years has been exclusively from Members within the decade 1870-80, at least thirty-seven out of thirty-eight being within this date, might not the complement be justly made up from senior Members, who otherwise will seem to be permanently excluded?

I am, Sir, yours truly,
A MEMBER (BY EXAM.) OF LONG-STANDING.
May 4th, 1885.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NORTHERN COUNTIES HOSPITAL FOR DISEASES OF THE CHEST.

THROUGH the resignation of Dr. John C. Murray a vacancy occurs in the honorary medical staff of this young but useful institution. The committee have made canvassing a disqualification, and I think the rule will have a good tendency, and might be well copied in like cases by some of our older medical institutions. Dr. John C. Murray is one of the founders of our Chest Hospital here, and has done good work in connexion with it. He is, I understand, about to release himself from the toils of town practice, and is removing to the south of Scotland. Dr. Murray a few years ago published a very successful work on the Use and Abuse of Tobacco.

THE MORTUARY QUESTION AT DURHAM.

Dr. Barron, at a late meeting of the Durham Sanitary Authority, in his farewell report as medical officer of health for the city, pointed out the urgent need which existed for a public mortuary being added to the sanitary conveniences of the city. A correspondent in the *Durham Chronicle* also refers to this want, which was painfully apparent in a case occurring a few days ago, and which became the subject of a coroner's inquiry, a remark from that official tending in the same direction. It appears that lately an old man who arrived from Newcastle by a day train was suddenly seized with an attack of illness which unfortunately proved fatal. It seems that the body remained in the ticket office for nearly three hours, and was exposed to the gaze of all passing in and out of the room during the time. No blame is cast on the railway officials by the writer; the painful occurrence was solely caused by the want of a public mortuary. The matter is to be brought before the committee of the Sanitary Authority with a view to its arrangement; but this is just one of those matters which are apt to be dropped under various excuses, unless prominently kept before the authority.

EPIDEMIC OF MEASLES AT JARROW.

A very serious and extensive outbreak of measles is reported at Jarrow, causing considerable mortality; indeed, there seems to be a wave of this disease passing slowly over our northern towns. At Jarrow, the Town Council, at a meeting presided over by the Mayor, decided to close at once all the week-day and Sunday schools in the borough.

CARLISLE MICROSCOPICAL SOCIETY.

At the meeting of the above Society an able and exhaustive paper on "Micro-organisms" was read by Dr. Lediard of Carlisle. An animated discussion followed the paper, and the lecturer received a cordial vote of thanks from a large meeting.

MUNIFICENT BEQUESTS TO THE TYNESIDE CHARITIES.

The late Mr. Frederick Glenton, many years a merchant in Newcastle, left a considerable amount of money to be distributed in charity, the chief scope of his charitable bequests being in the direction of institutions that had mainly for their object the befriending of children. The following local medical charities may be mentioned as having been benefited, among others, by cheques from the surviving executor, Mr. Wm. Nesham of this city—viz., Hospital for Sick Children, £500; Eye Infirmary, £500; Deaf and Dumb Institution, £400; Lying-in Hospital, £100.

The information which I gave you in a former letter respecting the regulations of the University of Durham appeared previously in one of our local and usually well-informed papers.

Newcastle-on-Tyne, May 4th.

EDINBURGH.

(*From our own Correspondent.*)

OPENING OF THE SUMMER SESSION.

The summer session in the University and Schools of Medicine commenced on Monday, May 4th. Notwithstanding the awkward arrrangement by which lecturers were obliged to commence their teaching on a day when many students are almost necessarily absent—an arrangement for which the University authorities are responsible,—the classes are reported as more than usually crowded. In the Extra-Academical School are several new courses of lectures, amongst which there are a short series of lectures on "Mental Disease," by Dr. J. Batty Tuke; and a class of Operative Surgery, under the direction of Mr. C. W. Cathcart; whilst within the University, in addition to the ordinary work of the session, a series of special courses is announced in the Faculty of Arts, conducted by the assistants to the professors in the various subjects.

PROFESSOR RUTHERFORD AND THE ANTI-VIVISECTIONISTS.

For some years the anti-vivisectionists have made great capital by depicting the Edinburgh Professor of the Institutes of Medicine in most sanguineous hues as the repulsive figure-head of a craft which is searching for the pole of some Tartarean sphere of scientific fallacy. His laboratory has been publicly likened to a slaughterhouse, and himself—even more explicitly than by mere inference—to the presiding genius of such a place. From time to time in past years the Professor has repelled these attacks—at times, in fact, in such strong terms as to increase the thrill of horror by which the adverse camp is constantly possessed. These reprisals are, however, things of the past; and of late the Professor has supplied an excellent example of the patient bearing of the cross. This might have continued indefinitely had not a recent attack of more than ordinary bitterness, supported by sweeping misstatements and championed by three clergymen, roused the long-suffering Professor to an energetic vindication of his own position in the matter. In a lengthy letter addressed to the local papers Professor Rutherford details the causes, nature, and results of his experiments on the liver, concluded some eight years ago, which have received wide recognition as of great scientific value, and which have since proved a never-failing source of bitterness to his opponents. What his present defence lacks in "wingéd" words, it more than makes up for in the calmness of its statements and the clearness of its reasoning; and, although public discussion of professional topics is apt in general to do more harm than good, as it usually lowers professional dignity, it is still to be hoped that, in the present instance, the public mind may be stimulated to reject the nauseous bolus of narrowness and fallacy which has of late been so vigorously thrust upon it.

CHARITIES AND THE POOR LAW.

Last week a public conference on the above subject was held in Edinburgh, at which several important papers were read by gentlemen whose position gave them the authority of specialists. Amongst other topics, the prevailing custom of employing paupers as nurses in union infirmaries was discussed, and all but unanimously condemned.

Edinburgh, May 5th.

PARIS.

(*From our Paris Correspondent.*)

PROFESSOR VULPIAN AND THE RECENT EXPERIMENTS ON THE SEVERED HEADS OF CRIMINALS.

The question has again been mooted as to whether those who have been decapitated suffer; and after additional experiments on the head of Gamahut, who was guillotined on the 24th ult. for the murder of a widow lady in Paris, coupled with those related by Claude Bernard, the presumption is that they do, for under the influence of transfused blood the blanched features recovered almost their normal expression, the eyelids were slightly open, and the lips quivered for a few seconds, as if to express some perception communicated from the brain. The conclusion, then, is that, so long as the brain contains any blood, the head of the decapitated person, which falls into a receptacle prepared for the purpose, is capable of seeing, of hearing, and of knowing that it is separated from the body. This view, however, was repudiated by Professor Vulpian at the last meeting of the Academy of Medicine on the following grounds:—A strong blow applied to the head, or a less severe one to the stomach, would cause instantaneous syncope; that is to say, consciousness would for the moment be entirely abolished. So it would be in the case of the severed head, but of course without any possibility of recovery; the weight of the guillotine falling upon the neck would produce the same result. Moreover, syncope would be occasioned by the sudden division of the carotid arteries, and the consequent emptying of the arterial system of the brain. Therefore, at the very moment that the brain ceases to receive the vivifying fluid from the heart, it loses all power of excito-motility, as well as all power of sensation; all this transpires as quickly as thought, and its duration may be compared to a flash of lightning. It happened opportunely that a dog that was undergoing some experiments in Professor Vulpian's laboratory was suddenly seized with hæmorrhage. Advantage was taken of this circumstance to immediately expose the brain and submit the latter to faradisation. Scarcely half a minute had elapsed between the arrest of the circulation and the galvanic irritation. It was impossible to obtain any movements in the legs. The effects of the electricity produced in the muscles of the head and nose were not, according to Professor Vulpian, due to the physiological transmission effected by the brain, but to the neighbourhood of the source of irritation; the brain, having lost all power of excito-motility, would in this case act as a mere sponge; and if such a condition was found to exist for only half a minute after the arrest of the circulation, the interpretation put on the effects said to be produced on severed heads by other experimenters must certainly be considered erroneous.

THE MICROBES OF CHOLERA DEJECTIONS.

Dr. Bochefontaine is persevering in his efforts to prove the innocuousness of the microbes cultivated in the diarrhœa of cholera patients, whether they be introduced into the system by the stomach or by hypodermic injection. He *cultivated the microbes of the diarrhœal liquid in peptonised* gelatine, with which he performed a series of experiments. At four different times he swallowed a quantity of this gelatine, containing bacilli of the second and third cultures, without feeling in the least any abnormal phenomena. In the next place, he injected hypodermically into guinea-pigs, and then into himself, a mixture composed of equal parts of water and of cultivated gelatine. These different experiments would, according to the author, show that the ingestion of the cultures of cholera microbes may not produce any morbid symptom in man; they prove that the hypodermic *injection of these cultures in man and in* animals may, if they are injected in comparatively large doses, produce inflammatory phenomena of a more or less grave character. If, on the contrary, the proportion of the microbic culture is weak, the injection produces no effect whatever. If we compare the results of these experiments, in which were employed microbic cultures, with those that were furnished by ingestion by the stomach and by the hypodermic injections of diarrhœal liquid, which formed the subject of a previous communication made by Dr. Bochefontaine (see my letter in THE LANCET of Nov. 22nd last), we are led to believe that the physiological *troubles* produced by this liquid are due to the action of a special *substance, and not to the* development of the microbic germs which it contains. These experiments further show that the blood of man and of animals in a normal state possesses the property of destroying *the microbes of* the diarrhœal liquid of cholera patients cultivated in peptonised gelatine.

Paris, May 5th.

SHIRLEY MURPHY TESTIMONIAL.

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J. Baugh Allen, Esq. ...	1	1	0	J. H. Badcock, Esq.... ...	1	1	0
Edwd. Hacker, Esq. ...	1	1	0	Nathan Robinson, Esq. ...	1	1	0
Richard Wilson, Esq. ...	1	1	0	Pro W. H. Corfield, &c. ...	2	2	0
F. W. Strugnell, Esq. ...	1	1	0	John MacCombie, Esq. ...	1	1	0
J. S. Glazier, Esq.	1	1	0				

The Executive Committee of the Shirley Murphy Testimonial Fund have, since Mr. Murphy's return to England, had the opportunity of ascertaining his wishes with regard to the movement which had been inaugurated during his absence, and in deference to his desire, they do not intend to proceed further with the presentation of a testimonial. The course which will be adopted in the disposal of the fund must necessarily be in the hands of the subscribers, who, we understand, will be immediately consulted. The Committee, however, propose to forward to Mr. Murphy an address as previously stated.

THE SERVICES.

THE RUMOURED EMPLOYMENT ON ACTIVE SERVICE OF CIVIL SURGEONS.

We are authorised to state that the rumour to which we referred in our last issue as to arrangements having been made for the employment on active service of civil surgeons at £3 per day is incorrect. No such posts are being made, or are in contemplation on the terms stated.

INDIA OFFICE.—The Queen has approved of the transfer to the half-pay list of Surgeon George Augustus Cones, of the Bengal Medical Establishment.

ADMIRALTY.—Staff Surgeon Michael Upington Greany, M.D., has been placed on the retired list of his rank.

The following appointments have been made:—Staff Surgeon Robert Grant, to the *Pembroke;* Staff Surgeon Robert W. Biddulph, to the *Orontes;* Staff Surgeon Richard V. M'Carthy, to the *Rupert;* Staff Surgeon Cecil Drake, to the *Duncan;* Staff Surgeon George Curtis, to the *Devastation;* Staff Surgeon Nicholas T. Connolly, to the *Ajax;* Staff Surgeon Mark A. Harte, to the *Hotspur;* Staff Surgeon William B. Fletcher, to the *Repulse;* Surgeon Frederick J. Lilly, to the *Devastation;* Surgeon George F. Dean, to the *Hotspur;* Surgeon George Welch, to the *Ajax.*

YEOMANRY CAVALRY.—Suffolk: Surgeon Robert Macnab, M.D., resigns his commission.

ARTILLERY VOLUNTEERS.—1st Worcester: Surgeon Geo. Wyndham Crowe, M.D., resigns his commission; Acting Surgeon Robert William Edginton, M.D., to be Surgeon.

RIFLE VOLUNTEERS.—2nd Cheshire (Earl of Chester's): Henry William King, Gent., M.D., *to be Acting Surgeon.*—10th Lanarkshire (Glasgow Highland): Donald Campbell Black, Gent., M.D., to be Acting Surgeon.—1st Volunteer Battalion, the Worcestershire Regiment: Arthur Robert Waddell, Gent., M.D., to be Acting Surgeon.

MEDICAL NOTES IN PARLIAMENT.

Cremation.

IN the House of Lords, *on the 5th inst., the Earl of* Dalhousie, in reply to the Earl of Onslow, stated that the Government did not consider it any part of their duty to encourage or to discourage the practice of cremation. The Government possessed no power at present to act in the matter.

Medical Act (1885) Amendment Bill.

In the House of Commons, on the 30th ult., Dr. Lyons moved the second reading of the Medical Act (1858) Amendment Bill. On the motion of Mr. T. P. O'Connor the debate was adjourned.

Burgh Police and Health (Scotland) Bill.

On the 1st inst. the following were named to act on the Select Committee on this Bill:—The Earl of Mar and Kellie, the Earl of Minto, Lord Balfour of Burleigh, the Duke of Argyll, the Marquis *of Lothian, the Earl of* Dalhousie, and the Marquis of Tweeddale.

Small-pox at West Ham.

Mr. G. Russell, in reply to Mr. Hopwood, said that there had been a severe epidemic of small-pox in the West Ham sub-district, and the returns for the last three years showed that the number of children unaccounted for, as regards vaccination, had been *greater than in other districts* in the neighbourhood of the metropolis. There had been insufficient hospital accommodation in the district; but, apart from that, he was not aware that defects *in sanitary* precautions had been the cause of the disease and mortality.

The Volunteer Medical Staff Corps.

On the 4th inst. the Marquis of Hartington, replying to Sir S. Northcote, said that an application had been received by the War Office from the officers of the Edinburgh University Volunteer Medical Staff Corps, asking that the corps might be included in the new Volunteer Medical Staff Corps. The Volunteer Medical Staff Corps was in some sense an experiment, and although it was *hoped to* extend the scheme, it was not considered desirable that there should be more than *one corps* at present.

Vaccination.

Mr. G. W. Russell, in reply to Mr. Hopwood, stated *that* at the Sheffield Hospital in 1882 the medical officer and a ward-servant who had both been revaccinated had attacks of small-pox so mild that scarcely any rash appeared. The cook, *who* had not been revaccinated, but who had previously had small-pox, had an attack in a *modified* form. The only severe case in the hospital at the time was that of a patient who had *never been* vaccinated; this patient died. A nurse who had not been revaccinated had an attack of a qualified nature, and the only severe case was that in which the patient had not been vaccinated and died. In reply to an inquiry by Mr. Hopwood as to whether he had communicated to the authors of the "Facts concerning Vaccination," published with the sanction of the Local Government Board, his view of the unguarded nature of the statement that no hospital nurse had been attacked with small-pox after revaccination, Mr. Russell replied that the National Health Society had been informed of the reply which was given on the subject on the 31st of March last.

Sewage Works at Tottenham.

On the 5th inst., Mr. Russell stated, in answer to a question by Mr. J. Stuart, that the Local Government Board have sanctioned a loan of £13,000 for works in connexion with the sewage outfall of the Tottenham district, with a view to the purification of the sewage before it is discharged into the Lea.

Small-pox Hospitals.

In the House of Commons on Thursday, Mr. Russell, in reply to Sir Lyon Playfair, who asked whether in the case of officers and servants for the service of the Metropolitan Asylums Board hospitals a proper interval was always allowed to elapse between their revaccination and their entering on their duties, and whether it was the fact that certain officers or servants at the Fulham Small-pox Hospital had entered on their duties without revaccination, said that inquiry had been made, and it was found that in the case of the North-Western, South-Eastern, and South-Western Hospitals an interval is allowed to elapse between the revaccination of the officers and servants and their entering on their duties. In the first-mentioned hospital the interval is stated to be forty-eight or seventy-two hours. As regards the Eastern Hospital, it has been the custom to revaccinate the officers and servants on the day of arrival at the hospital or the day following. At the hospital ships no interval elapses between the revaccination and exposure to small-pox infection. At the Western or Fulham Hospital the officers and servants are usually revaccinated on the day of their entering on their duties. There have, however, since May, 1884, been two instances in which the revaccination was not performed until some days after the assistants had commenced discharging their duties, and this was in consequence of an omission to report the cases to the medical superintendent.

The Health of the Troops on the Nile.

Lord Hartington, in answer to questions by Viscount Lewisham and Colonel Dawnay, said he telegraphed to Sir Redvers Buller an inquiry with reference to statements which had appeared in the *Standard*, and received a reply that the hutting was not finished at Debbeh, Merawi, and Kurot, but would be this week. The troops had had day shelter for more than three weeks. The percentage of sick was 7·1 per 100; the health of the troops was not very good, but it was not materially worse than at the time of the last report, on April 15th.

Obituary.

EDWARD T. TIBBITS, M.D. LOND.

AT Bradford, Yorkshire, on April 14th, at the age of forty-five years, Dr. Tibbits fell a victim to acute pneumonia. Worn out by an anxious attendance upon his eldest daughter, through an attack of the same disease, he became an easy prey himself. After ten years of anxiety—which those alone can appreciate who have struggled and waited for the slow growth of consulting practice,—the subject of our notice was called away just as the sky looked brighter, and as the fruits of patient labour appeared almost to be within his reach. In him the town of Bradford, and especially the medical charities, have sustained a grievous loss, which it will be difficult to make good.

Dr. Tibbits was educated at Repton School, and at University College, London. As a student, he held the posts of physician's assistant to Sir William Jenner and ophthalmic assistant to Mr. Wharton Jones at University College Hospital, clinical assistant at the Brompton Consumption Hospital, and house-surgeon to the Coventry and Warwickshire Infirmary. He gained the exhibition and gold medal in Chemistry in 1860 at the 1st M.B. Examination of the University of London, and passed his M.D. in 1869. Ten years ago he relinquished general practice at Rugeley in Staffordshire, chiefly on account of health, and was elected physician to the Bradford Infirmary, and a little later to the Fever Hospital and to the Institution for the Blind. These institutions he served faithfully to the time of his fatal illness. In 1879 and 1880 he was president of the Bradford Medico-Chirurgical Society, and always took a lively interest in its proceedings.

Naturally unpretentious and modest, yet somewhat impulsive and obstinate in nature, and possessing at all times the courage of his opinions, it was no easy matter to turn him aside, or to prevent him from carrying out any measure which he believed to be right. Cultured and refined as he was, he gathered round him a large circle of friends, who deeply regret their loss.

He was twice married, and has left behind him a widow and nine children, who, from no fault of his, are almost absolutely without provision for the future.

During his later years Dr. Tibbits held very decided views on the germ theory of disease, and on the bacillar hypothesis of woolsorters' disease in particular. He was a frequent contributor to the pages of THE LANCET, and notably a paper on the "Modern Theory of the Action of Digitalis" (THE LANCET, 1881). In religion he was a staunch Churchman and in politics a Liberal Conservative. Dr. Tibbits was buried at Clayton Church on April 17th, when large numbers of his fellow-townsmen attended to pay tribute to his memory.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The following gentlemen were admitted Members of the College on the 30th ult.:—

Ball, James Barry, M.D. Lond., Belgrave-road.
Batten, Rayner Winterbotham, M.D. Lond., Gloucester.
Davies, Arthur Temple, M.B. Camb., Finsbury-square.
Gamgee, Arthur, M.D. Edin., Manchester.
Griffiths, Herbert Tyrrell, M.D. Camb., Brook-street.
Martin, Sydney Harris Cox, M.D. Lond., Gower-street.
Phillips, John, M.B. Camb., Harley-street.
Rockwood, William Gabriel, M.D. Madras, Colombo, Ceylon.
Stewart, Edward, M.D. Brussels, Harley-street.

On the same day the following were admitted Licentiates:—

Anderson, James, M.D. Toronto, Portland-road, Dublin.
Armstrong, Hugh, Chalcot-crescent.
Barber, Halford Vaughan, Sandmere-road.
Barendt, Frank Hugh, Hampstead-road, Elm-park, Liverpool.
Basset, Walter, Knowle-road, Bristol.
Berkley, Ernest James Gibson, Camberwell-road.
Bird, Henry, Vicarage Villas, Neasdon.
Blight, John Henry, Chobham-road.
Booth, William Henry, Plymouth.
Bown, John Quinton, St. Mary's Hospital,
Browne, Harold Elliott, University-street.
Caley, Guthrie Neville, Clarence Villas, Windsor.
Childe, Charles Plumley, Bexhill, Hastings.
Clarke, Fincastle George Barlow, Fordwych-road.
Clift, Samuel Leonard, Tressillian-crescent.
Coleman, William Edward, Albert-street.
Cooper, Charles Bolingbroke, Gambier-terrace, Liverpool.
Creasy, Rolf, Guy's Hospital.
Emmett, Richard, St. George's Hospital.
Fowler, Charles Owen, London Fever Hospital.
Freeland, Ernest Harding, Middlesex Hospital.
Gentles, Thomas Lawrie, Derby.
Green, Charles Robert Mortimer, Rotherhithe New-road.
Growse, William, Bethlem Hospital.
Harcourt, Vincent Ximenes, Duncan-terrace.
Howard, Herbert, Trinity-square.
Hugill, George Frederick, Rosedale, Chislehurst.
Jackson, Herbert Francis, Talbot-road.
Jackson, Percy Vaughan, Portsdown-road.
Jessop, Edward, St. Bartholomew's Hospital.
Kershaw, James Edward, Brompton-square.
Kidd, Hugh Cameron, Leamington-road Villas.
Lamb, Hugh, St. Thomas's Terrace.
Lee, William John, Harcourt-road, Brockley.
Lipscomb, Edgar Richard Senhouse, Southwark-park-road.
Lysaght, William Conner, Frederick-place, Clifton, Bristol.
Mathew, Charles Pynsent, Milman-street.
Mathews, Frank Edward, Lansdowne-terrace, Richmond, Surrey.
Maynard, Frederick Pinsent, Barnes.
Meeson, Alfred, High-park-street, Liverpool.
Morris, Herbert Mackinlay, Henrietta-street, Covent-garden.
Norris, Edwin John, Barndale-road.
Nutting, Philip Henry, Lady Margaret-road.
Page, Harry Marmaduke, Westbourne-park.
Phillips, Lawrence W. Kinglake, Hove Dispensary, Brighton.
Pietersen, James, Lambeth-palace-road.
Pinhorn, Richard, Warwick-gardens.
Plowman, Sidney, St. Thomas's Hospital.
Rhys, Watkin Llewellyn, Crofton-road.
Roberts, Henry, Colebrook-row.
Smith, Frederick John, Bishopsgate Without.
Southern, Francis Gerald, Ludlow.

Soutter, James, Hull.
Steer, Adam William Thorburn, St. Bartholomew's Hospital.
Tanner, Herbert, St. Mary's Hospital.
Underwood, John Charles, Ashford.
Walsh, Charles Lawrence, St. Bartholomew's Hospital.
Whishaw, Reginald Robert, Cornwall-street.
Williams, John Frederick, Infirmary, Westmoreland-road.
Willis, Arthur Keith, West End-lane.
Willoughby, Alfred Harvey, Aberdeen-place.
Wunderlich, Otto Frederick, St. Luke's Hospital.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having passed the required examinations for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on the 30th ult.:—

Ackland, Charles Kingsley, L.S.A., Bideford, Devon.
Curgenven, John Sadler, L.S.A., Craven-hill-gardens.
Fooks, Henry, L.S.A., Kennington.
Gould, Ernest Edward, L.S.A., Exeter.
Lewis, Jenkyn, L.S.A., Llanon, Cardiganshire.
Richards, George William, M.B. Durh., Stourbridge.
Ritchie, Edward Duguid, L.S.A., Wimbledon-park.
Stedman, Frederick Osmund, L.S.A., Leatherhead.
Willan, Leonard James, L.S.A., Stoke Newington.

Admitted on the 1st inst.:—

Clift, Samuel Leonard, L.R.C.P.L., St. Johns.
Farmer, William Henry Francis, Anerley.
Gruchy, Charles William de, L.R.C.P.L., Ludlow.
Hehir, Patrick, L.R.C.P. Ed., Calcutta.
Howard, Herbert, L.R.C.P.L., New Beckenham.
Lee, William John, L.R.C.P.L., Devonport.
Martin, Joseph Henry Walklate, L.S.A., St. Albans.
Pietersen, James, L.R.C.P.L., Lambeth-palace-road.
Pinhorn, Richard, L.R.C.P.L., Warwick-gardens.
Roberts, George Augustus Edward, L.S.A., Twyford.
Smith, John Turville, L.S.A., Manchester.
Steer, Adam Wm. Thorburn, L.S.A., Jamaica.
Sutton, Alfred, L.S.A., Brockley.
Tronson, William Francis, L.S.A., Oxford-gardens.

Admitted on the 4th inst.:—

Bown, John Quinton, L.R.C.P.L., Nottingham.
Chick-Lucas, James Robb Goodman, Portsea.
Elkington, Henry Percival George, Gillingham-street.
Ellis, Donald Mackay, Chudleigh.
Fegen, Charles Milton, Bedford.
Godfrey, Henry William, M.B. Aberd., Hornchurch.
Harthan, Herbert Damville, Sandbach, Cheshire.
Henderson, George Christopher, Natal.
Lever, Frederick, Epsom.
Lewis, Charles James, Liverpool.
Moore, Walter Francis, Preston.
Parsons, Henry Compton, Hampton Wick.
Pearson, Albert Edward Alexander, Horsforth, near Leeds.
Postlethwaite, Frank, Oxford-road.
Pott, Francis Henry, Cornwall-gardens.
Wethered, Frank Joseph, L.S.A., Clifton.
Woods, Frank, Warrington.

Admitted on the 5th inst.:—

Apthorp, East, Hornsey.
Austin, Herbert Ward, Devonport.
Beard, Frederic, Trinity-square.
Calrow, Thomas, Bury, Lancs.
Eales, George Young, Yealmpton, Devon.
Jabboor, Habeeb, Beyrout.
Jervis, Arthur, Connaught-square.
Podmore, Robert, Eastbourne.
Pratt, George Arthur, Wolverhampton.
Price, Alfred Edward, Clapham.
Pritchard, Joseph James Gauler, Blackheath.
Ramsay, Herbert Murray, Redhill.
Scott, George Henry, Osset, Yorks.
Tuke, Thomas Seymour, Albemarle-street.
Whishaw, Reginald Robert, Liscard, Cheshire.

Admitted on the 6th inst.:—

Bent, George, Gladstone-street.
Bindloss, Edmund Frederick, Leighton-road.
Calvert, James, Grenville-street.
Clark, John Stallard Foot, Saltash, Cornwall.
Dill, Robert Charles Gordon, Burgess-hill.
Dornford, Charles Thomason, L.R.C.P. Ed., Wantage.
Green, Albert, Forest-hill.
Halley, Percy Oswald Ward, Newport Pagnell.
Helps, George Crawford, Weston, near Bath.
Knaggs, Francis Henry, Putney.
Richmond, William Stephenson, Stanwick-road.
Scatliff, Phillip Melancthon, Macaulay-road.
Smith, George Francis, St. Anne's-terrace.
Wylde, Harry Frank, Manchester.

UNIVERSITY OF OXFORD.—At a congregation held on the 1st inst. the degree of M.D. was conferred on

Lloyd, Francis, Jesus.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 1st inst. Dr. P. H. Pye-Smith was appointed an elector to the Professorship of Physiology, and Professor Robertson Smith was appointed an elector to the Professorship of Sanskrit. The degree of M.D. was conferred on

Lane, James Oswald, St. John's.
Lyon, Thomas Glover, Emmanuel.

UNIVERSITY OF GLASGOW.—The following gentlemen passed the Third Professional Examination for the degrees of M.B. and C.M. in April last:—

Adam, Basil J.
Aird, Alex. W.
Alexander, W. M., M.A., B.Sc.
Beattie, Robert M'G.
Brown, James A.
Brown, Walter F.
Campbell, Arch. T.
Carmichael, Alex.
Crawfurd, Robert K. B.
Cullen, John B. F.
Currie, John.
Davidson, James F.
Davis, George W.
Dewar, Daniel M'K.
Duff, Jas. K., M.A.
Fergus, Wm. Henry.
Gardner, R. Irvin.
Goff, Bruce E.
Haddow, R. W. T.
Hamilton, Robert.
Hay, Walter.
Henry, Robert.
Hickin, Herbert.
Manners, Wm. H.
Marshall, John.
Marshall, William.
Mathieson, Alex. L.
Miller, Alfred E.
Monteagle, Henry W. B.
MacColl, Donald S.
M'Conechy, James.
M'Houl, Hugh M.
MacKechnie, C. A.
MacKeith, Alex. A.
MacKeith, John.
M'Lachlan, James.
MacLeod, David T.
Macquarrie, John A.
Pyle, William.
Ramsay, Robert.
Ritchie, John.
Robertson, Robert.
Robertson, William.
Rowat, John.
Roxburgh, Alex.
Sinclair, H. W.
Stewart, John (Renfrew).
Steil, James W. H.
Thorburn, John.
Wallace, Wm. (Glasgow).
Wallace, Wm. (Greenock).
Watson, James.
Wyllie, James.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 30th ult.:—

Curgenwell, John Sadler, St. Bartholomew's Hospital.
Gaudevia, Merwanjee Nowrojee, Bombay.
Graham, Charles Nicol, Guy's Hospital.
Pinhorn, Richard, St. George's Hospital.
Roberts, Arthur, London Hospital.
Smith, John Turville, Manchester School of Medicine.
Sutton, Alfred, Guy's Hospital.

At the Preliminary Examination in Arts held at the Hall on April 30th and May 1st and 2nd, the following candidates were successful:—

FIRST DIVISION.

*Lindsay, Herbert Stott.
*Stradling, Henry R. Skynner.

SECOND DIVISION.

Aylward, Walter Charles.
Biddle, Henry George.
Blakeman, Charles Smith.
Bromley, Francis Edward.
*Burditt, Ralph Austin.
Cory, Ernest Richard.
Dryland, Leslie Winter.
Elgee, William.
Farncombe, Wm. Turberville.
Goddard, Bertram.
Harrison, Chas. Alan.
*Jones, Frederick Warner.
Kirby, William Owen.
*Livesey, Edgar Wm.
Marder, Nicholas.
Mole, Alfred Ernest.
Montagu, William.
McTaggart, Norman E. E.
*Osborne, Oswald.
Parish, Beauchamp Frederick.
Pearce, Charles Ross.
Richards, J. Barrow Osborn.
Steele, Geo. Herbert.
Templeton, Percy.
Wade, Albert Holland.
Yonge, Eugene.

* Passed also in Elementary Mechanics.

Passed in Elementary Mechanics alone:—

Andrew, Francis William.
Gane, E. Palmer Steward.
Greene, Arnold James.
Linstead, Edward Flatman.
St. Cedd, R. G. Whitworth.
Smith, Alfred.
Spilsbury, Frank Hands.
Webb, Frank.

Passed in Greek alone:—

Fraser, Frank.
Fraser, Elias.

Passed in German alone:—

Newington, John S.

Passed in Chemistry alone:—

Andrew, Francis William.

THE Prince of Wales has contributed one hundred guineas to the Dublin Hospital Sunday Fund.

THE annual conversazione of the Royal Society was held on the 6th inst.

WESTMINSTER HOSPITAL.—The Frederick Bird Prize and Medal for 1885 have been awarded to Mr. Alfred S. Gubb.

THE PHARMACEUTICAL SOCIETY.—The annual dinner of this Society will be held at the Holborn Restaurant on the 19th inst., at 6.30 P.M.

ROYAL INSTITUTION.—Professor Odling will give the first of two lectures on "Organic Septics and Antiseptics" on Saturday, May 16th.

THE Committee of the Leeds Harehills Cycling Club, being strongly of opinion that members intending to compete in the road competitions arranged for by the Club should be physically fit, recommend that all intending competitors furnish medical certificates to the secretary at the time of entering.

Superannuation.—Mr. E. N. Sison, late medical officer of the eleventh district of the Holborn Union, has been granted a superannuation allowance of £70 a year.

The *Cronica Medica* of Lima, Peru, states that during the month of January there were thirty-seven deaths in that city from small-pox, thirty-two of the victims being under twelve years of age.

The festival dinner in aid of the funds of the North London or University College Hospital will be held at the Langham Hotel on the 13th inst., His Royal Highness the Prince of Wales in the chair.

Presentation.—Dr. Raitt, who delivered a series of "First Aid to the Injured" lectures for ladies at Manchester, has been presented by the members of the class with a marble timepiece and an address.

The Aberdeen Club.—The next half-yearly dinner of the Aberdeen University Club, London, will be held at the Venetian Salon, Holborn Restaurant, on Saturday, May 16th, at 7.45 p.m., the Earl of Aberdeen in the chair.

On the 2nd inst. the body of Dr. Phelps of Exeter was found wedged between two rocks at Ness, Teignmouth. It is supposed that while walking home from a picnic he was seized with heart disease and fell into the water.

The festival dinner in connexion with the Royal Hospital for Children and Women, Waterloo-bridge-road, will be held at Willis's Rooms on the 13th inst., His Royal Highness the Duke of Cambridge, K.G., in the chair.

At the annual meeting of the Metropolitan and National Nursing Association for providing trained nurses for the sick poor, on the 1st inst., it was stated that during the past year 527 cases had been nursed, and 17,374 visits paid.

At the 14th anniversary of the Brighton Young Men's Christian Association, Professor Drummond from Glasgow attended, and delivered two addresses in the banqueting-room of the Royal Pavilion. A deputation of medical students and others from Edinburgh University have also been holding special services, which have proved highly successful.

Measles in Chester.—The alarming outbreak of measles in Chester continues to spread, and two of the largest schools in the city have just been closed. The disease has broken out in Mrs. Gladstone's Home for Children at Hawarden, and at least one of the inmates has been removed to the Chester Infirmary. Sixteen deaths have already been registered since the epidemic set in.

The German Hospital.—The fortieth anniversary dinner in aid of the funds of this institution was held on the 6th inst., when it was stated that a total of 24,500 patients had been treated during the past year. Of the 1822 in-patients admitted during the year, 353 were accident cases, most of them being English. During the evening subscriptions, and donations amounting to £3473 were announced by the secretary.

The Devonshire Hospital and Buxton Bath Charity.—The annual general meeting of the supporters of this institution was held on the 2nd inst., when an exhaustive account of the great and increasing usefulness of the charity was read by Dr. Robertson. During the past year 2491 in-patients were admitted, exceeding the number received during 1883 by 261. The average number of patients daily resident in the hospital was 157·1.

Anthropological Institute.—At a meeting of this Society on the 28th ult. the following papers were read:—By Mr. A. L. Lewis, on the Past and Present Conditions of certain Rude Stone Monuments in Westmoreland; by Admiral F. S. Tremlett, on Quadilateral Constructions near Carnac, in which was described certain enclosures explored by the late Mr. James Miln; and by M. Jean L'Heureux, on the Kekip-Sesoators, or ancient sacrificial stone of the north-west tribes of Canada.

Important Circular to the Police.—Consequent upon the numerous representations which have been made with reference to the treatment of persons arrested for alleged offences, and especially to prevent a recurrence of the mistakes which have been made when prisoners suffering from illness have been treated as drunken persons, the Secretary of State has issued a circular to the police authorities throughout the kingdom, directing that strict orders should be given to the police that when any prisoner complains of illness, shows symptoms of illness or of being in a feeble state of health, whether he make complaint or not, the police-surgeon should be summoned and the prisoner medically examined. If the prisoner is found to be suffering from serious illness, a report as to his health is to be presented to the magistrates before whom he is brought.

On the 23rd ult. an inquest was held on the body of George Webb, M.D., who was found dead at his residence, 101, Hollydale-road, Peckham. Dr. Webb was well known in the district, and a few days before his death had himself attended as a witness at a coroner's inquest. Death was certified to be due to fatty degeneration of the heart.

Sanitation in Holborn.—On the 23rd ult., an inquiry was held by Mr. Cubitt-Nicholls, from the Home Office, as to an official representation made by the Holborn District Board of Works, with a view to obtain an order directing the Metropolitan Board of Works to deal with an unhealthy area adjoining Brook's Market, as a metropolitan improvement. Evidence was given as to the shocking sanitary condition of the locality, it being stated that the population was 232, and that during two years there had been 154 cases of sickness—scrofulous cases, sore throats, or cases of consumption not being included in this number. The court rose after a sitting of seven hours.

Telephone and Telegraph Wires.—On the 27th ult. Sir Joseph Bazalgette was examined before the Select Committee of the House of Commons, who are inquiring into the law controlling the overhead and underground wires. Sir Joseph stated that the system of overhead wires was first commenced twenty years ago. At that time there were no underground wires. There were now 800 miles of overhead wires in the metropolis, and ten times that quantity of underground wires. He would give the power of making bye-laws to the Metropolitan Board of Works, the district authorities merely acting as the executive, without any appeal to a Government department. Under the Building Act, which divided London into seventy-two districts, with a surveyor to each, they had all the machinery necessary for dealing with this question.

University of London.—At the meeting of the Senate of the University of London held last week the following gentlemen were elected examiners for 1885-86:—Chemistry: Professor J. Emerson Reynolds, M.D., F.R.S.; Professor T. E. Thorpe, Ph.D., F.R.S. Botany and Vegetable Physiology: Professor Bayley Balfour, M.D., D.Sc., F.R.S.; Professor F. O. Bower, B.A. Comparative Anatomy and Zoology: Professor E. Ray Lankester, M.A., F.R.S.; Professor Alex. Macalister, M.D., M.A., F.R.S. Practice of Medicine: W. H. Broadbent, M.D.; W. Miller Ord, M.D. Surgery: W. M. Baker, Esq.; Sir William Mac Cormac, M.Ch., M.A. Anatomy: Professor D. J. Cunningham, M.D., C.M., F.R.S.E.; H. Greenway Howse, M.S., M.B. Physiology: Professor Arthur Gamgee, M.D., F.R.S.; Professor Gerald F. Yeo, M.D. Obstetric Medicine: F. H. Champneys, M.A., M.B.; John Williams, M.D. Materia Medica and Pharmaceutical Chemistry: J. Mitchell Bruce, M.D., M.A.; T. Lauder Brunton, M.D., D.Sc., F.R.S. Forensic Medicine: Augustus J. Pepper, M.S., M.B.; Professor George Vivian Poore, M.D., B.S.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Bailey, C. F., M.B.Lond., M.R.C.S., has been appointed House Physician to the West London Hospital.

Barnard, Arthur J., M.R.C.S., L.R.C.P.Ed., Junior House-Surgeon to the Darlington Infirmary, has been appointed Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire, vice John Buchanan, M.B. and C.M.

Benham, Henry James, M.D.Lond., M.R.C.S., has been appointed Physician to the East Suffolk and Ipswich Hospital.

Buchanan, John, M.B. and C.M.Glas., Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire, has been appointed Senior House-Surgeon at the same, vice John Henry Jackson, M.B. and C.M.Ed., resigned.

Flinn, John James, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Everton No. 1 District of the West Derby Union, vice Worrall, resigned.

Godfrey, Frank, L.R.C.P., L.R.C.S.Ed., has been appointed Honorary Consulting Surgeon to the Islington Dispensary.

HARPER, ALEXANDER, M.B.Dur., M.R.C.S., has been appointed House-Surgeon to the West London Hospital, vice Maitland Thompson, L.R.C.P.Ed., L.M., M.R.C.S., resigned.

HOLLIS, ELPHINSTONE, M.D., C.M.Ed., has been appointed Physician to the East Suffolk and Ipswich Hospital.

MARSHALL, WILLIAM, M.R.C.S., L.S.A.Lond., has been appointed Junior House-Surgeon to the Huddersfield Infirmary.

POPE, PERCY, M.R.C.S.Eng., L.R.C.P.Ed., has been appointed Poor Law Medical Officer, Public Vaccinator, &c., for the Hayling (North and South) District of the Havant Union.

SHAW, WILLIAM, M.R.C.S., has been appointed Medical Officer of Health for the Shire of Barrabool, Australia.

SHILLITOE, RICHARD, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the First District of the Hitchin Union, vice R. R. Shillitoe.

SIMMONS, HAROLD, L.R.C.S., L.S.A.Lond., has been appointed Physician Assistant to the Middlesex Hospital.

VERRALL, THOS. JENNER, L.R.C.P.L., M.R.C.S., has been appointed Assistant-Surgeon to the Sussex County Hospital.

WARNER, FREDERICK A., M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the West London Hospital, vice James Herbert Menzies, M.R.C.S., L.S.A.Lond., resigned.

WATSON, ARCHIBALD, M.D.Paris, M.R.C.S., L.S.A.Lond., has been appointed Professor of Anatomy at the New School of Medicine, Adelaide University.

WOOD, PERCY MOORE, L.R.C.P.Lond., M.R.C.S.E., J.P.S.A., has been appointed Government Medical Officer and Protector of Aborigines for the Port Darwin Northern Territory, South Australia.

Births, Marriages, and Deaths.

BIRTHS.

BARRACLOUGH.—On the 21st ult., at Dulwich-road, Herne-hill, S.E., the wife of R. W. Sutton Barraclough, M.D., of a son.

BOTHAMLEY.—On the 26th ult. at Bromley, Kent, the wife of R. Broughton Bothamley, M.R.C.S., of a son (stillborn).

BRIDGMAN.—On the 1st inst., at Croasdale Bank, Slaidburn, Yorkshire, the wife of Mr. Herbert A. Bridgman, L.F.P.S.G. and L.M., of a daughter.

COLLIER.—On the 2nd inst., at Capstone House, Hammersmith, the wife of N. C. Collier, L.R.C.P., of a daughter.

PRINGLE.—On the 29th ult., at Angelton, Bridgend, the wife of H. T. Pringle, M.D., Medical Superintendent of the Glamorgan County Asylum, of a daughter.

TOWNSEND.—On the 27th ult., at Benares, the wife of Surgeon-Major Townsend, A.M.S., of a daughter.

MARRIAGES.

BURGESS—KEW.—On the 29th ult., at the Parish Church, Clapham, W. Milner Burgess, M.R.C.S., &c., of Harlesden, to Ellen Isabella, daughter of F. E. Kew, Esq., of Clapham.

CATON—IVORY.—On the 5th inst., at Christ Church, Edinburgh, Richard Caton, M.D., of Liverpool, to Annie, only daughter of the late William Ivory, W.S., of Edinburgh.

FARAKER—CREGEEN.—On the 28th ult., at Christ Church, Forest-hill, J. J. Faraker, M.R.C.S., L.S.A.Lond., to Ada J. Cregeen, third daughter of the late J. J. Cregeen, M.D., F.R.C.P.E., and step-daughter of W. Cregeen Faraker, M.R.C.S.E., L.S.A.Lond., Ravensdale, Forest-hill.

GARLICK—PETERKIN.—On the 30th ult., at St. Mary's Parish Church, Clitheroe, George Garlick, M.D.Lond., to Annie Gertrude, second daughter of William Peterkin, Craven Bank, Clitheroe.

STORRS—CROKER.—On the 30th ult., at St. Mary's, Penzance, Arthur Storrs, M.D., M.R.C.P.E., of Mexborough, Yorkshire, to Ellen Walters, youngest daughter of the late John Gifford Croker, M.D., F.G.S., of Bovey Tracey, Devon.

UNDERHILL—MURIEL.—On the 28th ult., at St. Giles' Church, Norwich, by the Rev. W. C. Muriel, Rector of Debden, Essex, assisted by the Rev. [illegible] W. N. Ripley, Vicar of the Parish, Frede[illegible] Tipton, Staffordshire, son of W. Lee [illegible] of Tipton, to Beatrice Alice, second daughter of Charles Evans Muriel, Esq., of Norwich.

DEATHS.

BARBER.—Lost at sea, in February, in the Royal Mail steamer *Humber*, Alfred Barber, M.R.C.S., youngest son of Alfred Barber, of Eastrop House, Basingstoke, aged 28.

BUCHANAN.—On the 2nd inst., William Buchanan, M.D., of Church Gate, Cheshunt, Past Master of the Society of Apothecaries, in his 85th year.

CHAPMAN.—On the 3rd inst., at The Laurels, Chiswick, John Strange Chapman, M.D., Deputy Inspector-General of Army Hospitals, in his [illegible]th year.

DITCHETT.—On the 28th ult., at Louth, Lincolnshire, William Edwin Ditchett, M.R.C.S., aged 49.

HIGGINS.—On the 6th ult., at Heathfield, Peel, Isle of Man, Henry Higgins, M.R.C.S., L.R.C.P., &c., aged 57.

HOWARD.—On the 25th ult., at Sandgate, Kent, John William Howard, M.R.C.S., L.A.C., L.M., in his 58th year.

HOYLAND.—On the 1st inst., at his residence, York-road, Hove, Brighton, Edward Hoyland, M.R.C.S., &c., formerly of Sheffield, aged 74.

MACLEAN.—On the 28th ult., at Portman-street, Portman-square, John Maclean, M.D., aged 68.

PHELPS.—On the 1st inst., at Teignmouth, suddenly, by an accident, F. P. Phelps, surgeon, of Victoria-terrace, Exeter, aged 52.

WHITE.—At Broad-street, Pendleton, J. Atkin White, M.R.C.S., L.S.A.Lond., aged 42.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, May 7th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 1	29·73	S.W.	51	46	93	57	44	...	Bright
" 2	29·65	S.W.	52	47	110	60	45	·02	Cloudy
" 3	29·64	S.W.	52	48	97	63	44	·03	Hazy
" 4	29·53	N.E.	50	47	85	59	46	...	Cloudy
" 5	29·55	N.E.	45	44	...	50	41	·12	Raining
" 6	29·35	S.W.	49	45	85	56	44	·12	Cloudy
" 7	29·65	N.	45	41	85	54	41	·26	Cloudy

Medical Diary for the ensuing Week.

Monday, May 11.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, May 12.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. The Right Hon. the Earl of Northesk: Exhibition of a Collection of Worked Jade from New Zealand.—Mr. J. H. Kerry-Nicholls: The Origin and Characteristics of the Maoris in the King Country, New Zealand.

Wednesday, May 13.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. E. Wethered: Structure and Formation of Coal.—Mr. A. W. Waters: Use of the Avicularian Appendage in the Classification of the Bryozoa.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens as usual. Dr. Benington: Tetanus in the Puerperium.—Mr. Lawson Tait: Double Uterus, &c.—Dr. Biglow: Gynæcological Surgery.

Thursday, May 14.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Living Specimens. 8.30 P.M. Mr. W. A. Brailey: On the Condition of the Ciliary Nerves in certain Diseases of the Eye.—Mr. E. Nettleship: Note on the Spontaneous Disappearance of Diabetic Cataract.—Mr. J. B. Lawford: Case of Nævus of Choroid (with Microscopic Specimens).—Mr. Jonathan Hutchinson: On Reflex Ophthalmitis.—Mr. W. Spencer Watson: Intra-ocular Gumma in a Child the subject of Inherited Syphilis.—Mr. Simeon Snell: Case of Periodic Paralysis of Third Nerve.—Mr. W. H. Jessop: (1) Choroiditis Disseminata; (2) Rupture of Eyeball (living specimens).

Friday, May 15.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. Dr. W. N. Thursfield: On the Etiology of Goitre.—Mr. F. E. Atkinson: On an Outbreak of Diarrhœa traced to Polluted Water.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Dr. A. Hughes Bennett and Mr. R. J. Godlee: Case of Cerebral Tumour.

ROYAL INSTITUTION.—9 P.M. Prof. Burdon Sanderson: Cholera.

Saturday, May 16.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Odling: Organic Septics and Antiseptics.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of The Lancet *to be addressed "To the Publisher."*

"TOLERANCE AND ADVANTAGE OF LARGE DOSES OF POTASSIUM IODIDE."

To the Editor of The Lancet.

Sir,—In The Lancet of April 18th, under the above heading, you quote from the *New York Medical Record* a case in which the dose of iodide was increased from eight to thirty grains three times a day. I think every one who has had much to do with syphilis must have met with cases in which larger doses were not only tolerated, but were necessary in order to obtain the desired effect. My own rule, when iodide is indicated and well borne, has long been to increase the dose more or less rapidly according to circumstances, until some effect is produced, quite irrespective of quantity. The largest daily dose I remember to have prescribed was 540 grains (iodide of ammonium); but I have no doubt more has been, or might be, required. He who holds his hand under the impression that he has given the iodides a full and sufficient trial because a certain number of grains or drachms has been reached, will fail to obtain some of the most important results which it is in the power of iodine to produce.—I am, Sir, yours faithfully,

Stafford-street, W., May 2nd, 1885. Arthur Cooper.

To the Editor of The Lancet.

Sir,—In your issue of April 18th a case of tolerance of large doses of potassium iodide is recorded. In 1873 I had to treat a case of chronic ulcerated throat, supposed to be of syphilitic origin. The patient had been under treatment for some time without benefit from ten-grain doses of potassium iodide, when I increased the doses to twenty grains, and ultimately to forty grains, three times a day, with marked improvement. He took two-drachm doses for several weeks, until the throat had healed. On account of a slight relapse, he had to resume his old doses for a short time, afterwards reducing the amount to thirty grains twice a day. The patient took the latter quantity for several months. I prescribed it with aromatic spirit of ammonia, and he took each dose with half a pint of milk. What may be thought the most remarkable feature of the case is that he gained more than a stone in weight during the exhibition of the remedy—and the milk.

In contrast with the above, I have prescribed two-grain doses of potassium iodide for a stout, free-living patient on several occasions; but he always detects it, no matter what pains I take to disguise the fact of its administration. In this case it causes a nasty metallic taste.

I am, Sir, yours obediently,

Somerby, Oakham, April 27th, 1885. J. Jackson.

Late Assistant.—We think decidedly that there is a moral obstacle to practising. Our correspondent undertook to sign a bond not to do so. That he was not asked to sign does not lessen the obligation not to practise.

Lex.—Authorities differ. There is no proof of it.

Surgeon-Major Sargent's paper will be inserted in an early number.

"IMPRISONING AN UNDOUBTED LUNATIC."

To the Editor of The Lancet.

Sir,—I was pleased to see that you drew attention, in your issue of April 25th, to the case of poor Freund being imprisoned for bawling in St. Paul's Churchyard. It is quite true he is a lunatic. I have known him for some ten or fifteen years. Whilst at his studies at St. Thomas's Hospital no student was more persevering or had greater prospects; but, I believe, family misfortune deprived him of the means of following the profession. For a time he went as an assistant to medical men, but was so strange and irregular in his habits that he was advised to give it up. Since then his life has been more or less a blank, and it would be a real charity to assist him into the home of some medical man who would look after him; or he should go to Bethlem or some place where he will have proper treatment. I should be willing in any way to assist in his support. I am, Sir, your obedient servant,

Sackville-street, W., May 1st, 1885. James Startin.

M.R.C.S. or M.R.C.V.S.?

Medical titles are always rather puzzling to the public. It is, however amusing to see in a provincial paper a letter from a local resident denying a report that his child had been suffering from small-pox, and adding a "doctor's certificate" to that effect, the doctor's signature giving as his qualification "M.R.C V.S." On looking at the Medical Register, we find he is "M.R.C.S." Did the patient's father insert the *V* to improve appearances?

Insurance.—Mr. Cook's essay and the supplement relating to industrial insurance are published by the author, Arthur I. Cook, at Finsbury-square-buildings, London, E.C.

Dr. H. S.—We regret that we cannot assist our correspondent in the matter.

"RINGWORM."

To the Editor of The Lancet.

Sir,—Will you allow me to make a few remarks on Dr. Murphy's letter under the above heading in your last issue.

1. There is but little doubt that, as a rule, ringworm of the body will not recur (provided there is no disease of the scalp and no reinfection) if some treatment be continued until the skin is all but normal again at the circumference of the patch, and the margin is quite free from all papules and desquamation, and the place is not raised above the level of the surrounding skin.

2. I think Dr. Murphy is right when he remarks, "The germ that revived probably found a safe hiding-place in some of the hair-follicles." The only way to be certain that every trace of the disease has been eradicated where downy hairs exist is to carefully scrutinise the place with a lens, and to see that there are no minute hairs affected. I have often noticed a few of the small hairs broken off and diseased on a patch of body ringworm which might otherwise have been considered cured.

3. In examining epidermic scales for the fungus in ringworm of the body, it is far better to look for the mycelium threads than the conidia. The mycelium is to be seen as long, slender, pale-greyish, sharply contoured threads like ribands, jointed at irregular intervals, and forming a network between the epidermic scales. To obtain these scales for examination, the inner part of the outer ring, just where it is beginning to desquamate, should be scraped.

4. Of course, I may be mistaken, yet I think it is very possible if the patch seen by Dr. Murphy on March 12th, when it appeared to be well, had been closely looked at with a lens, that one or two broken-off downy hairs would have been detected. If a child be sent back to school at the end of a fortnight, it is always advisable to examine the place from time to time in case of any recurrence.

I am, Sir, yours faithfully,

Christ's Hospital, May 4th, 1885. Alder Smith.

J. F. W.—There is no district in England which is specially beneficial in this affection. Sea-air is usually to be avoided, as it acts as a local irritant; but the whole question of climate is one to be determined by a full consideration of all the elements of the particular case.

DRINKING PARAFFIN OIL.

To the Editor of The Lancet.

Sir,—As drinking paraffin oil by accident or design is not uncommon, the following case may be of interest.

M. B——, aged eighteen, primipara, went through a normal labour on the 5th inst., in which she was attended by an externe from Guy's Hospital. On the twelfth day she showed symptoms of puerperal mania; but no medical assistance was applied for. On the fourteenth day, whilst left alone, she attempted suicide. I found the patient in an excited condition, with an incised wound two inches in length on the left side of the neck. Whilst suturing this wound, I detected the odour of paraffin oil, and she did not deny that she had swallowed some. I also found the mark of a ligature round her neck, consisting of a wheal with reddened edges for the greater part of its circumference, and an abrasion for the remainder. The pupils were moderately dilated, pulse 90, full. The patient was given warm milk-and-water, followed by twenty grains of copper sulphate in warm water. In about fifteen minutes she vomited freely, and not less than fifteen ounces of oil floated on the top of the vomit. This was proved to be paraffin, and corresponded with the amount missing from a bottle which had been left on the table. It must have remained in the stomach for at least forty-five minutes. She experienced no further inconvenience as the result of the triple attempt, but her mental condition being dangerous, she was removed to an asylum on the sixteenth day. I am, Sir, yours truly,

Great Charlotte-street, April 22nd. Henry Willson.

Doubtful.—1. Yes.—2. The infection precedes the disease by a few days, and lasts till the disease is at an end.

Dr. Hudson (Leeds).—The paper is marked for early insertion.

INSTRUMENT FOR IRRIGATING THE UTERUS.

To the Editor of The Lancet.

Sir,—In your report of the meeting of the Midland Medical Society in your last issue you state: "Dr. Neale showed an instrument for irrigating the uterus," &c. "The makers are Messrs. Woodall, York." This should be "Messrs. Wood and Co., York."

I am, Sir, yours obediently,

York, May 4th, 1885. Thos. J. Russell.

CHOLERA AND ITS PREVENTION.

To the Editor of THE LANCET.

SIR,—I did myself the honour to send you, on Oct. 18th, 1884, a pamphlet which I published in 1871, called "Hindu View of Cholera: a Lecture."

I venture to draw your attention to the late reports from Valencia, in Spain. They are there adopting the method which my lecture suggests. At page 1 I say: "The philosophy, or 'form,' of the great discovery of Jenner, and of the practice of inoculation, has *never yet been* grasped or sufficiently studied. Had it been, it is probable that now we might have known a potential preventive against cholera." At page 9: "*In Europe you now happily seek* more a prophylaxis than a cure; but your efforts are cramped and misdirected by the poison and germ theories. The 'pregnant' instances of vaccination, inoculation, quinine, iodine, mineral waters, changed climate, &c., as prophylactics have not yet had a shadow of their just weight on your method." Of course, the instances here cited are in some cases used by way of analogy, to illustrate my method. Again, at page 11: "The splendid light which the instances of vaccination, quinine, &c., give, not having their just effect on your method, it thus happens that whilst cholera appears in the race of man you are content to practise a pernicious treatment of symptoms, and to put trust in disinfectants, directed against totally inefficient causes." At page 13: "When we remember the great power of quinine and arsenic in a *series of fevers*; when we know that a series of fevers of ten to twenty years' duration can be speedily removed by small amounts of these substances; when we remember the instances of prophylaxis which *nature herself* presents, such as change of climate, passions for food, and certain elements, &c.—we cannot but be full of confidence for future discovery. We must grasp what Bacon has taught us on the 'pre-eminency of instances.'" "Many directions are open to *the student for discovery* which may lead to results as *great as that of* Jenner." At page 16: "On the other hand, I daily expect to hear the announcement that some student has, by following the analogies and alliances of nature *(and which are open to, and part of, all of us), been* led to perceive the 'form' of cholera, and to perceive the direction or element of supply, which, given to the system, would *render the first change or paralysis*, whose residual necessities are the symptoms we call cholera, impossible." "......and that every disease *must* have its prophylaxis."

My lecture is an argument from the *a priori* Hindu philosophy, which philosophy has been re-drawn in Europe by Descartes, Kant, &c., but which has yet too little penetrated your Western method. I argued in my lecture that cholera is not "specific"; that it is an allied "gradation"; that it had long culminating pre-cholera stages in molecular changes in the system, and that *our hope of dealing* with it was by coordinating the system prior *to* the appearance of that stage which is commonly known as cholera. But I must not take up your space—except on the ground that *my* quotations of 1871 may be suggestive *for* further prophylactic trials. My own trials, were I again in charge of cholera districts, would be to give quinine, acids, and *some* of the aromatic class as prophylactics.—I am, Sir, yours truly,

London, April 28th, 1885. GOLAUB SING, M.D.

A. B.—The answer will *entirely depend upon the* terms of the appointment. The locality in which a medical officer of health resides is a point which is considered when his appointment receives the sanction of the Local Government Board; but they do not of necessity require residence within the district. Indeed, in some instances access to the various portions of a district is facilitated by residence at a railway centre outside the district. Hence there is no rule on the subject.

A Patient is thanked for his communication; but we do not think his suggestions would enlighten the profession.

"AUTUMNAL STONE."

To the Editor of THE LANCET.

SIR,—With reference to Mr. Robert Jones' inquiry about these Chinese preparations, I may *refer him to page 224 of* my "Chinese Materia Medica" (Trübner). The "Ts'iushih" is the product formed by the evaporation of the urine of young children, mixed with common *salt or sulphate of lime to hasten* the crystallisation. It consists mainly of urea mixed with lithates, phosphates, &c. It is met with in small cakes, crystalline, deliquescent, and evidently moulded *in little cups*. It is salt to the taste, and is used as a diuretic in renal disease. It is often kept in Chinese kitchens to soften fresh meat required *for* immediate use. "Wu hu No" means "sal ammoniac from Wu-hu hien in Nganhwin province," where these "autumnal stones" are made. Made *from* ammoniacal urine, the Chinese confound these "stones" with sal ammoniac (nau-sha), a drug in great repute as a solvent *for opacities* of the cornea. Chinese oculists are remarkably successful in removing nebula and albugo of the cornea by applications of this "autumnal stone," mixed with sulphate of soda.—I am, Sir, yours faithfully,

FREDK. PORTER SMITH,
Member of the Asiatic Society of Paris.
Shepton Mallet, May 2nd, 1885.

[illegible].—Our correspondent is really the best judge in the question he puts to us. The case was a very important *one*, and his charges should be at once dignified and reasonable.' We would make only one suggestion—viz., to let the charges have reference to visits, time, and distance, and not to medicines.

[illegible].—There seems to be no great harm in the announcement.

INSANITY IN BENGAL.

IN 1883 the number of admissions into the lunatic asylums in Bengal, which had fallen in 1882 to 185, the lowest number on record, rose to 209. The increase was the most marked in the case of males, of whom 184 were admitted, against 144 in the previous year; while the number of females admitted was 25, against 21 in 1882. The number of readmissions was 23, and consisted of males only. The daily average population of the asylums was 873·67, against 857·12 in the previous year. Out of the 232 cases admitted and readmitted during the year, causes were assigned in 131 instances—29 being moral causes, and 103 physical causes. Of these latter 76 were ascribed to Indian hemp, and of this number only 34 recovered. These figures, however, give no idea of the total number of lunatics in Bengal, and asylum statistics do not afford a true indication of the prevalence of insanity, since only the most dangerous cases are admitted into asylums in India.

Mr. F. C. Batchelor.—We do not see our way to assist our correspondent in the matter.

"CASCARA SAGRADA."

To the Editor of THE LANCET.

SIR,—In reply to Mr. T. L. K. Davies's question in your last issue, I beg to say that cascara sagrada possesses both hepatic and intestinal principles; and at present there is no definite therapeutical study of the action of either principle in an uncombined form. The chemical composition of the drug consists of three resins, about 10 per cent. of the weight of the bark, tannin, oxalic, malic, fat oil, wax, starch in abundant *quantity, and a small percentage of a volatile oil* bearing the characteristic odour of the bark. Its most reliable preparation is the fluid extract. It acts upon the hepatic secretions and circulations, the whole gastro-intestinal canal, stimulating its morbid condition, and the neighbouring glands to healthy action. As a cholagogue it is invaluable. In chronic constipation its action is good, producing full, easy, pleasant stools, without any tormina, tenesmus, or nausea. The liquid extract, combined with the tincture of iodine painted on the hypogastric region, *daily*, until the bowels are moved easily, has given *the same result* after repeated trials on patients suffering from habitual constipation. As a remedy for dyspepsia it is superior to many others of its class, being *pleasant to take*, and *producing* no nausea.

I am, Sir, yours obediently,
Geneva, May 4th, 1885. H. C. GLANVILLE.

Mr. David J. Allen.—No comment on the case is to be found in either of the numbers mentioned.

"DISINFECTING CHAMBERS."

To the Editor of THE LANCET.

SIR,—I see, in looking over some back numbers of THE LANCET, that in the issue for April 18th "Medical Officer of Health" inquires as to the best disinfecting chamber. I would strongly advise your correspondent to employ Lyon's Steam Disinfector, which by super-heated steam quickly produces a heat of 230° F. It has been used in these camps for the last year, giving complete satisfaction, and working for close on 8000 patients. The agent, Mr. John W. Lyon, 1, Cowper's-court, Cornhill, will doubtless give all information.

I am, Sir, yours faithfully,
C. W. WAYLEN,
Medical *Superintendent, Darenth Camps* for
May 5th, 1885. Convalescing Small-pox Patients.

⁎ We have received other letters bearing testimony *to* the value of Lyon's Disinfector.—ED. L.

"THE TITLE OF 'DOCTOR.'"

To the Editor of THE LANCET.

SIR,—I have *often* been *tempted to reply in* your notes anent the above title, but until I saw the letter signed "M.D." in your issue of the 25th ult. I refrained.

"*M.D.*" says he thinks that if the Colleges of Physicians and Surgeons allow their Licentiates to take the title of "Doctor" they should repay him for the time and money—and, I may add, the 2000 or 3000 hours *of* extra study (often after bedtime)—spent. "M.D." adds that if they do not do so, he must consider that he has been mercilessly robbed. Who can say he is not in the right? I think your correspondent's letter more to the point than most letters upon this vexed subject.

I am, Sir, yours obediently,
Stranraer, April 27th, 1885. J. CARRICK MURRAY.

S.—We should be unable to find room for the replies which would probably be called forth by the insertion of our correspondent's note.

"CONTAGIOUS DISEASE CARDS."

To the Editor of THE LANCET.

SIR,—What Dr. Kenyon says in his letter published in your columns last week is correct, and your observations thereon are but natural. *The* figures, as stated, are those already published by Mr. Francis Vacher, to whom I am deeply indebted for the kind permission given to me for employing them in the cards in question. Henceforth means shall be taken to make his claim to their authorship known.

I am, Sir, your obedient servant,
Maidstone, May 2nd, 1885. MATTHEW A. ADAMS.

Unqualified.—The only thing that can be done is to ascertain the exact facts. If they *prove* that a qualified medical man has abetted the practice of the lady in question or other unqualified persons, they should be laid before the Medical Council; but evidence short of proof is of no use.

M.B.Edin.—Our correspondent should mention the facts to his friend. The case seems a special one, and our correspondent seems to us entitled to the fees. But between right-minded friends there should be no difficulty.

RE NON-COMBATANTS.

To the Editor of THE LANCET.

SIR,—I am now attending an officer who, with his regiment, was present when, on March 22nd, the Arab forces of Osman Digna rushed on the zereba held by the 1st Battalion of the Berkshire Regiment and penetrated one corner, as the local newspapers put it. This officer tells me—"The first wounded I saw were two men of the Army Hospital Corps, who are sent into battle unarmed, for a good walking-stick would be better than their side-arms, and who were completely at the mercy of the enemy with their long spears and shields." This is carrying the doctrine of non-combatant to a length which borders on the dangerous, and suggests the question as to how far the authorities are liable for sending men into battle unprotected because they choose to call them non-combatants. I am, Sir, yours obediently,

May 8th, 1885. PAX.

Mr. C. C. Burman (Belford, Northumberland).—The joint should first be smeared with oil; then a mould taken with a paste of plaster-of-Paris, from which it is easy to get a cast with a second fluid of the paste.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Nov. 1st, 1884, appears the following notice of an appointment—viz., that of "Hozier, C. H. Smith, to the Gundagai Hospital." As I am, and have been, the only qualified medical officer attached to the above institution for the past fifteen months, you will greatly oblige by giving the above the most unqualified contradiction. I am, Sir, yours obediently,

Gundagai, New South Wales, March 9th, 1885. J. J. O'DWYER.

_ The announcement was extracted from an Australian medical journal.—ED. L.

Mr. James H. Reilly.—No.

Enquirer is referred to our advertising columns.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Eben. Watson, Glasgow; Mr. J. Bryant, London; Mr. Rodger, Aberdeen; Mr. Gandar, London; Mr. C. E. Paget, London; Mr. C. W. Waylen, Darenth; Mr. James, London; Mr. Read; Mr. Putney; Mr. Steele, London; Mr. F. C. Wright, Manchester; Dr. J. Ince; Mr. Arthur Cooper, London; Dr. G. P. Bate; Mr. Berkeley Hill, London; Mr. Cross, Bristol; Dr. G. Oliver, Harrogate; Mr. Appleyard, Bradford; Mr. Love, Mitcham; Mr. Startin, London; Mr. Somers Vine, London; Mr. C. Atkin, Sheffield; Mr. Parry, Bangor; Dr. Fenwick, London; Dr. McMunn; Dr. Welch; Mr. Hodges, Ryde; Dr. Scott, Berwick-on-Tweed; Prof. Humphry, Cambridge; Mr. Williams, Talgarth; Mr. Anderson, Kirkwall; Mr. Bully, London; Mr. Bainbridge, Middlesbro'; Mrs. Palmer, Erdesley; Mr. Bailey; Mr. Banning, Bushey; Mr. Livingstone; Mr. Ranson, Stafford; Mr. Jeffrey, Eastbourne; Mr. Fuge, Taunton; Mr. Abbot, Sheffield; Mr. Bullock, Folkestone; Mr. Pollett; Mr. Gill, Tavistock; Dr. Adams, Martock; Mr. Hunt, Alexandria; Mr. Hope, Erdington; Mr. Parnell, Forest-hill; Mr. D'Orsey; Dr. Lewers, London; Messrs. Oppenheimer and Co., London; Mr. F. Cox, London; Dr. Syof; Mr. Beardsley, Grange-over-Sands; Mr. Simmons, Droitwich; Mr. Walker, Middlesbro'; Dr. Urquhart, Perth; Mr. Ullrich, Pulina; Messrs. Wilcox and Co., London; Mr. Wiffen, Brighton; Mr. McMunn, Seafield; Dr. Thomas, Glasgow; Dr. C. Nedwill, Christchurch; Mr. F. P. Smith, Shepton Mallet; Dr. Heywood Smith, London; Mr. W. Alexander, Liverpool; Mr. Hilton, Bury; Dr. Bristowe, London; Mr. H. Denham, London; Mr. Kestin, London; Mr. Heaton, Birmingham; Mr. F. C. Batchelor, Brockley; Mr. Alder Smith, London; Mr. Montague, London; Mr. Marshall, Huddersfield; Messrs. Kegan Paul and Co., London; Mr. Saunders, London; Mr. Upton, London; Mr. Marsh, Fulham; Mr. Pike; Mr. Saville; Mr. Ruspini, Knutsford; Dr. Male; Mr. Palmer, Chelford; Mr. Lacy, London; Dr. Ernest Sansom, London; Dr. Thomas Savill, Paris; Dr. Colman, Yeovil; Mr. Whitford, London; Mr. Spurway, Rome; Mr. Frampton, Weston-super-Mare; Dr. Gledhill, Broughton; Dr. Montero; Mr. J. Taylor, London; Mr. Cartland, Windsor; An Outsider; Lex; M.R.C.S., Highbury; M. N.; S.; Doubtful; A. D., Stroud; H. B.; A. B.; Pax.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Eberle; Messrs. Wyleys and Co., Coventry; Mr. Higgins; Mr. Owen, Huddersfield; Mr. Morgan, Edinburgh; Mr. Ward, London; Mr. Morgan, Edinburgh; Mr. McDonald, Manchester; Dr. Muscroft, Pontypridd; Messrs. White and Co., Havant; Messrs. Bell and Bradfute, Edinburgh; Mr. Grant, Birmingham; Messrs. Macmillan and Co., Cambridge; Dr. Napier, Agremont; Dr. Morton, Kilburn; Mr. Parry, Brandon; Dr. Fox, R.N., Bristol; Mr. O'Kelly, Stafford; Mr. Dunn, Cleody Mortimer; Messrs. Powneeby and Co., London; Mr. Fanman, Auchtermuchty; Miss Roberton, Leicester; Dr. Maynard, Brith; Messrs. Woolley and Sons, Manchester; Messrs. Burroughs, Wellcome, and Co., London; Mr. J. M. Lloyd, London; Dr. Duckworth, London; Messrs. Leflund and Co., London; Mr. Calder, Liverpool; Messrs. Trubshaw and Co., Mold; Mr. Beaman, Newton-le-Willows; Mr. Wolff, London; Mr. Thompson, Wolston; Mr. Hargreaves, Leeds; Mrs. Griffiths, London; Mr. White, Kingsland; Mr. Long, Sherborne; Mr. Coltmann, Ben Rhydding; Mr. Osborne, Manchester; Messrs. Mackay, Edinburgh; Miss Carson, Burton-on-Trent; Mr. Lockwood, Sheffield; Mr. Heap, Swanage; Mr. Wells, Bury; Mr. Gutteridge; Mr. Williams, Weir; Mrs. Strong, Sandport; Dr. Parry, Bridgend; Mr. Treves, London; Dr. Heelas, Bonchurch; Dr. Bridgman; Mr. Julien, Newark; Messrs. Higgins and Son, Reading; Mr. Tupholme, Louth; Mr. Holloway, Kidderminster; Mr. Edwards, Chester; Messrs. Ford and Co., London; Mr. Cockson, Gainsboro'; Mr. Johnson, Gloucester; Mr. Webb, Bury; Mr. Smale, Macclesfield; Mr. Watters, New Tounants; Mr. Earp; Miss Spence, Meigle; Dr. Stainthorp; Mr. Field, Bradford; Mr. Hope, Birmingham; Mr. Taylor, Airdrie; G. C. P., Forest-hill; M.D., London; M.D., St. Ives; Secretary, Manchester Royal Infirmary; A. B., Liverpool; B. P. X.; Alpha, London; The Secretary, Hertford Infirmary; X., Rawcliffe; M.R.C.S., Crewkerne; M.D., Tunbridge Wells; M.D., Lincoln; Medicus, Manchester; A., Liverpool; T. T., Liverpool; M.D., Crockherbtown; Medicus, Carrington; Cumberland; E. W., Hartlepool; A. R. P.; Medicus, Ashford; C. J. D., London; F.S.A., Wye; Cantab.; Medicus, Eastbourne; J. B. S., Eastbourne; Medicus, Edinburgh; F. M., Guildford; A. H., London; Locum Tenens, Southampton; H. G.; Medicus, Sheffield; Secretary, Liverpool Hospital for Women.

Guernsey Mail and Telegraph, Guernsey Star, Newberry Weekly News, The News, Southport Visitor, Church of England Temperance Chronicle, Southport Guardian, Liverpool Courier, Jarrow Guardian, Manchester Courier, Manchester Evening Mail, Dundee Courier, Darlington and Stockton Times, York Herald, Glasgow News, Stockport Advertiser, Cheshire County News, Staffordshire Sentinel, Engineering Review, &c., have been received.

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Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

Clinical Lecture

ON A CASE OF

DISSEMINATED CEREBRO-SPINAL SCLEROSIS IN AN EARLY STAGE, AFFECTING EXCLUSIVELY THE RIGHT EXTREMITIES.

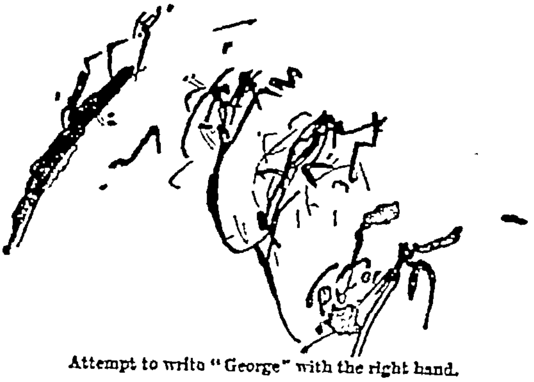
By DYCE DUCKWORTH, M.D., F.R.C.P.,
PHYSICIAN TO, AND LECTURER ON CLINICAL MEDICINE AT, ST. BARTHOLOMEW'S HOSPITAL.

GENTLEMEN,—I bring before you to-day a patient lately mitted to Bed 1 in John ward, whose case furnishes me with some points of great interest, to which I shall ask your attention. It is one of a class well fitted for a clinical lecture, which, as you know, is nothing if not demonstrative, and little more than a systematic or didactic one if the patient is not brought before you. Clinical medicine has all to do with individual cases, and that teaching of it is most proper which best illustrates the points to be noted to each of you in as direct and living a manner as possible.

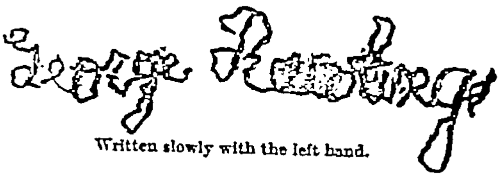
I will presently tell this man to walk across the theatre, and ask you to notice his gait. If you look at him first as he stands at rest, you will not observe anything remarkable about him. You see a young man in seeming good health, well nourished, and with complete control over his equilibrium. I now ask him to close his eyes. He stands erect, and without any tremor or instability. And now, as he walks, you notice a peculiarity in the action of his right leg. This limb moves stiffly, and there is over-action of it. It is lifted higher off the ground than the other, and is clumsy in movement. We say there is some spastic action in it. I now give him this glass of water to take in his right hand. At once, you see, a violent *spasmodic* action occurs, vigorous tremulation, so great that he nearly empties all the water before he has well seized the glass. If he next attempts to raise the vessel to his lips the movements become more and more exaggerated, so that all the water is spilt and the empty glass rattles against his teeth. I remove the vessel from his hand, and all the spasm ceases forthwith. *As he stands* quietly once more, you notice that the right arm remains tranquil and free from tremor. I try his power of grasp in each hand, and find a marked weakness in the right one, although he is a right-handed man. I now lay bare his forearms and compare the condition of his muscles. You observe no signs of wasting; the muscles are well developed and of good and equal tone on both sides. On examining his face, you see that his muscles of expression are stable and free from tremor, his lips firm, and his eyeballs quite steady. His pupils are unequal, certainly, but that is due to the action of atropine in one of them, used to allow examination of the retina of the right eye. No squint; no facial palsy. Testing his sensory functions, we find no abnormal state; all is as it should be. On inquiry as to any subjective sensorial sensations, he assures us all is natural in each of the four extremities. To curtail our further examination, I may add that there is nothing more to be detected by any physical methods we can employ, save that the knee-reflexes are exaggerated, markedly on the right side, while no ankle-clonus can be elicited. We have, then, a seemingly healthy and vigorous young man, whose only troubles are a clumsy limping gait, due to disorderly action of his right leg, and inability to employ his right hand and arm because of powerful tremulation and disorderly spasm, which come on the instant he directs his will into this extremity; and this is all. Before he leaves the theatre I ask him to repeat a sentence after me. You notice that he *speaks* clearly and fluently—with a good Wiltshire accent to be sure, but without any hesitation or difficulty; and yet, again, on protruding his tongue, you find no noteworthy tremor or peculiarity in it. Let us now take up the history of this case; it is very brief.

G. R——, aged twenty-one, a groom, was sent up to us by a former pupil of the hospital, and admitted on Feb. 14th. He states that *nine months* ago trembling movements began in his right arm, which prevented him from following his occupation. Later on the right leg became affected, so that he could not walk far on account of the weakness in it. *Inquiry into his past history* revealed no important illness. He had never had rheumatism, and there was no known history of this or of gout in his family. He had never had chorea, although his present ailment was at first believed to be of this nature. There was no neurotic history in his family, no indication of any previous paralytic attack or hemiplegia, no injury of any kind, and no history of fits. His duties entailed exposure to all kinds of weather, but to no extraordinary exposure. Previous to admission, he had been treated, we learned, with arsenic, belladonna, mineral water bathing at Bath, &c., all without avail.

You have already noted that the patient appears a healthy and well-nourished man, and that so long as he makes no voluntary efforts with the limbs of the right side of his body there is no indication of disease about him. I show you a specimen of his attempt to write his name. (See woodcut.) After violent efforts to control the right hand he made this unintelligible series of scrawls. With the left hand he has learned to write fairly legibly, but slowly and with difficulty, still without any *spasm or tremor*. He is awkward in setting his right forefinger on any point; thus he makes bad shots at his nose when he tries to touch the end of it, and hardly succeeds in getting near it. Dr. Steavenson has given us a report on the electrical reactions of the muscles of the affected limbs, and he states that they all react normally to both continuous and interrupted currents, and that there is no loss of electro-sensibility. We have seen the exaggerated reflexes at the knees, especially on the affected side; and you may note an increase in the supinator-reflex of the right arm. No fibrillary muscular contractions. On examining the thorax, nothing abnormal is found. The heart-sounds are healthy and sufficiently loud. The urine is natural and the sphincters act perfectly. Special senses not perverted. No vertigo. Knows where his feet and hands are. Retinæ perfectly healthy, and optic discs well-defined. No nystagmus; pupils react naturally; no strabismus. No history of syphilis, and no signs of either inherited or acquired disease of this character. No tenderness on percussing the cranium at any point. In trying to follow with his right toes a circle drawn on the floor is very clumsy and erratic. He can jump, though with exertion of more force than is necessary for the distance traversed. The difficulty with the right leg is best seen when he tries to run.



Attempt to write "George" with the right hand.



Written slowly with the left hand.

We find, on the whole, more negative than positive signs *in this man*, and yet we have very definite symptoms before us. What is the lesion here, and where is it? What is the diagnosis and what the prognosis, and the best treatment of it? I mentioned that chorea had been at first suspected in the case. *Chorea is sometimes* one-sided, and often so, for a time in many instances. You would not or you should not long be mistaken as to this. You know that choreic movements *are incessant* except during sleep, and not only elicited by effort, although they are aggravated by voluntary efforts. And you would not expect to meet with a case of one-sided chorea lasting continuously for nine months. We may, therefore, put that aside. You think, perhaps, of another nervous disorder characterised by tremors and paralysis agitans; the shaking palsy (Parkinson's disease) suggests itself to you. Is this the malady before us? Here is Parkinson's own definition, written in 1817; observe if it tallies with our case: "Involuntary tremulous motion with lessened muscular power in parts not in action, and even when supported; with a propensity to bend the trunk forwards and to pass from a walking to a running pace, the senses and intellect being uninjured." This definition will not apply here. The rule is for the tremor to be persistent and constant in shaking palsy, and rather to cease or moderate when action is induced. The contrary is the case here. Action at once induces tremor. The age of this patient is against his being the subject of shaking palsy, this disorder being very rare before forty years of age are reached. Have we here to deal with a case of so-called post-hemiplegic chorea? I think not, because we have no history and no signs of a past attack of hemiplegia, and the characters of this man's tremors are not those of the disorder I have alluded to. To mention mercurial tremors is sufficient. These are symmetrical, and affect the head, and the signs of mercurialism are always obvious. We can also exclude hysterical tremors and malingering.

We are brought, at last, to consider this case, then, as one of a class known as insular or disseminated cerebro-spinal sclerosis, or Charcot's disease, as it has been called. It is a remarkable example, certainly, because the disorder is, at present,—note, I say, *at present,—hemiplegic in character, and also manifestly in an early stage.* We do not often see such cases. This is our diagnosis: sclerotic patches situated in the left half of the brain, possibly in corpus striatum or crus, and possibly in some portion of the medulla spinalis. I should not like to pronounce with greater certainty anything more than this at present, though I might exclude the inferior frontal convolution and parts around the fissure of Sylvius, with some other regions. We may exclude scrofulous and syphilitic disease in the case, and we are in face of the characteristic lesions which are usually found in these cases, and for which I refer you to your studies in morbid histology. The age of our patient is just that at which this malady declares itself. It is equally common in each sex, and very rare after forty. Exposure to cold has been a commonly assigned cause. In this disease no muscular *wasting* occurs, although loss of muscular *power* is found, and no electrical changes arise. Paresis precedes the tremors, and the reverse is the case in shaking palsy. The reflexes are exaggerated. I should not omit to point out to you that many symptoms are wanting in this patient to complete the picture of a typical case. Such a one we had fifteen months ago in John ward. For example, one looks for nystagmus, and for certain symptoms referable to disorder in the medulla oblongata in most of these cases. I never met before with the exact conditions you see in this man; but, still, I have hardly any hesitation in making my diagnosis.

As to prognosis. This is certainly grave. I surmise that we have so far only early symptoms before us, and that the disease will make sad progress in time. We may fear the onset of paresis and tremors in the sound limbs, and the implication of speech with what are termed bulbar symptoms. The sclerotic process may spread and new patches of it occur in other portions of the cerebro-spinal system, thus setting up new symptoms. The course of the malady is slow, and may occupy from five to ten years. Deceptive periods of improvement may occur from time to time. Too often the disease goes on from bad to worse till the patient is rendered helpless and bedridden, the limbs becoming rigid and paralytic dementia supervening. Can we do nothing to arrest this terrible process? Must it go on to the bitter end? Alas! the resources of our art are, we must honestly avow, powerless as yet to avert the progress of this terrible malady. Physicians have been very assiduous in elaborating the differential diagnosis of nervous diseases of late years, but in respect to therapeutics we have as yet scored few triumphs. The outlook is bad, and we might almost despair of rendering help. We shall never do this, I hope, but rather strive the harder to find means of arresting this untoward process. No one drug is pre-eminently indicated. I am giving this man mercury, and mean to bring him fully under its influence. He takes three grains of blue pill each night. Not that I am trying to eradicate any syphilitic taint, for, in truth, we know of none in the case. But we know that mercury is a powerful drug and able to modify nutritional force very materially. We shall do our patient no harm with it. It may be that some of these obscure perversions of growth are evolutional forms of syphilis transmitted from infected ancestry, and so mercury, fully tried, may chance to be of special use. We know, at any rate, that in the peculiar form of systematic sclerosis of the posterior spinal columns known as tabes dorsalis—locomotor ataxia—syphilis plays a very prominent part, to the extent, indeed, of 80 per cent., or more, of all cases. Not that the lesion is itself directly syphilitic or gummatous, but that syphilis, as syphilis, seems to predispose to the particular form of sclerotic change in the cord which sets up the disease we know as tabes dorsalis. We are also maintaining the nutrition of this man's nervous system by cod-liver oil and a good diet. Nitrate of silver has been found of use in early stages of this disease. But for some time to come I should prefer to use mercury and iodide of potassium and carefully watch their effects, and I shall bring the results and the further history of this remarkable case before you on a subsequent occasion.

ON THE

SIGNIFICANCE OF A PECULIAR MURMUR IN RELATION TO THE DIAGNOSIS OF INTRA-THORACIC DISEASES.

By J. S. BRISTOWE, M.D. Lond.

(Continued from p. 837.)

Case 2. *Aneurysm of aortic arch; compression of both innominate veins, and communication between aneurysm and left innominate; great œdema and congestion of head and neck, and upper part of trunk; death; autopsy.*—Susannah F——, a married woman aged forty-six, was admitted under my care on May 27th, 1884. She has had moderately good health on the whole; has had one child, no miscarriages; has never had syphilis. Nine years ago she had typhoid fever, with two relapses, and was in hospital for nine months. Last winter she complained a good deal of rheumatism. About that time she first suffered from shortness of breath and palpitation. Five or six weeks ago the patient first observed swelling of the neck and about the eyes, and a little later she noticed some difficulty of swallowing, and first complained of aching pain between the shoulders. She has had some cough all along. The above symptoms have increased upon her up to the present time.

The face and neck of the patient are much swollen and œdematous, and the lips, cheeks, eyelids, and ears much congested; the swelling involves also the upper part of the chest and the shoulders and upper arms. The veins in the neck are greatly distended, and form large spongy masses just above the clavicles; the veins also in the upper part of the thorax, in front and behind, and about the shoulders, are much enlarged. There is no ascites, and no œdema whatever below the nipples. The lower extremities, indeed, are emaciated. She complains of dyspnœa, cough, and severe pain in the chest, more especially between the shoulders. Chest generally resonant, and breath-sounds normal, except at the base, where there is some crepitation. Cardiac dulness not increased in area; apex beats in sixth interspace, directly below the nipple; all over the cardiac area, and along the arch of the aorta, may be heard a loud systolic murmur, and also what by some is regarded as a diastolic murmur. The fact, however, seems to be that a peculiar prolonged murmur, commencing with the systole and continued through the greater part of the diastole, is audible over the aortic area and upwards to the right clavicle, diminishing in intensity as one passes from this region. The systolic portion of the murmur is loud, somewhat musical, and of uniform character during the whole of the cardiac systole; but the murmur is continued through and after the second sound as a kind of musical hum, which gradually dies away. The murmur is audible in the back, along the course of the aorta. There is no definite dulness or pulsation to be detected beneath the clavicles or in the course of the aortic arch. Pulse 88, equal in the two wrists, not jerky; respiration 24, but laboured; and when she coughs there is manifest stridor. Phonation natural; no sign to the laryngoscope of affection of the larynx. The liver extends an inch or two below the ribs, and is tender on pressure. The urine contains a trace of albumen. Nothing is noticeable with respect to the digestive functions. There does not seem to be any actual difficulty in the act of swallowing; no enlarged glands or tumours to be felt anywhere.

There is very little to be added to the above account, excepting that repeated examinations fully confirmed the observations above detailed. With occasional imperfect remissions she gradually got worse up to the time of her death. The dilatation of the veins in the neck, upper part of the thorax, and shoulders varied somewhat, but on the whole increased. The œdema also varied to some extent, but also on the whole increased; and latterly, partly in consequence of this, partly in consequence of the concurrent lividity of the surface, her aspect was most distressing—indeed hideous. Her face, neck, shoulders, and bosom became enormously swollen, her eyelids congested and closed, her nose buried in her cheeks, her lips thick and the lower one pendulous, with a huge double chin prolonged laterally to the lobes of her ears. Latterly, too, the œdema extended down the arms, and still later involved also the abdominal walls and vulva, and even the lower extremities; moreover, petechial extravasations appeared beneath the integuments of the face and neck and upper part of the back. The dyspnœa became aggravated, and she had for the most part to be propped up in bed, and slept in this posture with her head lolling forwards over her chest. Her cough was troublesome and paroxysmal, and was attended with more or less muco-purulent expectoration, and on two or three occasions with hæmoptysis. Deep breathing was always attended with stridor, but there was never any impairment of phonation or involvement of the vocal cords. The condition of the thoracic viscera, so far as we could ascertain, remained unaltered. There were never any clear local signs of aneurysm or other tumour; never any distinct proof of consolidation of lungs or effusion into the pleuræ; and the murmur at the base of the heart retained its characteristic features from first to last. It must be added, however, that the great œdema of the thoracic walls, and more especially the enormous bulk of the mammæ interfered more and more with physical examination of the chest. The pulses at the wrists remained equal; but it was noted once or twice that the left pupil was somewhat smaller than the right. No enlarged glands ever appeared in the neck or elsewhere, and no tumours of any kind in the abdomen. She complained usually of more or less pain in the upper part of the chest and between the shoulders, sometimes a sense of pricking, sometimes aching or cutting; and occasionally the pain extended down the right arm; less frequently down both arms. This pain was often severe enough to keep her awake. The breasts also became very painful. She never had any actual difficulty in swallowing, and for the most part took food fairly well. But she gradually got weaker; and during the last three or four weeks became very drowsy, at times being difficult to arouse, and when awake inclined to ramble. Her temperature throughout her illness was generally subnormal. She died on August 1st, on which day it rose to 100·4°.

Necropsy.—There was much anasarca and lividity, especially in the head and neck and upper part of the trunk. There were some hæmorrhages in the substance of the left *pectoralis major*. *Chest*: both pleuræ adherent, the adhesions being œdematous. Lungs dark-red and firm but crepitant everywhere, excepting the left lower lobe, which was quite collapsed. The bronchial tubes contained frothy mucus. The pericardium presented a small quantity of serum, and towards the base of the heart appeared thickened. The right side of the heart was somewhat enlarged, but on the whole the organ was little, if at all, above the normal bulk. The valves were all healthy. The coronary arteries presented patches of atheroma. An aneurysm about two inches in diameter sprang from the transverse arch of the aorta about three inches above the valves, and bulged towards the right. There was a little old laminated clot adherent to its walls, and the cavity contained also a little pale and coloured recent clot. The aneurysm pressed upon the innominate veins, without obliterating them, and communicated in front by two small round openings with the left innominate vein. The larger of these was about a line in diameter. The aortic arch was very atheromatous. The abdominal cavity did not contain any fluid. The liver was congested, and evidently in the early "nutmeg" condition. The spleen was large and firm. The kidneys were rather small, and somewhat granular on the surface. There were two small fibrous tumours connected with the outer surface of the uterus, which was retroverted. There were no urates in the right great toe-joint.

I need scarcely say, perhaps, that the case which I have just detailed, and of which whatever was mysterious during life is fully explained by the post-mortem revelations, was not only interesting to those who watched it, but presented difficulties to those who tried to interpret it. I must confess that my own diagnosis was erroneous. It was of course quite obvious that the patient was suffering from an intra-thoracic tumour, which, amongst other things, obstructed either the vena cava descendens or both innominate veins. It was quite obvious, too, that there was a loud murmur commencing with the cardiac systole, most intense at the base of the heart and over the manubrium, but audible even to the apex. As has already been pointed out, there were some differences of opinion as to the character of the murmur or murmurs. Some of my younger colleagues, men of ability and experience, held that there was a double aortic murmur, and consequently constriction and regurgitation at the aortic orifice. I always maintained that the murmur was single and such as it has been described above, and that, therefore, it could not possibly indicate simple disease at the aortic orifice; and my view was so far confirmed at the post-mortem that the aortic valve was found absolutely healthy. But dominated by the memory of my first case, I leant to the belief that the patient was suffering from a highly vascular malignant growth. I think now that what turned out to be the real condition of things ought to have presented itself to my mind; but it did not. I went down late to the post-mortem examination; indeed, it was supposed to be completed; and I learnt that the case was one of simple aortic aneurysm, associated with healthy cardiac valves. I at once pointed out that nothing had been discovered to explain the murmur which had misled me during the patient's lifetime, and turning to a very able clerk of mine, a high wrangler, I said, "Mackenzie, you are our greatest authority on acoustics and hydrostatics, and must help us to solve the riddle." He at once said, "Perhaps there is a communication between the aneurysm and a vein." I acquiesced, and straightway a careful examination was made among the scattered fragments, which resulted in the discovery that such a communication existed. Had I not fortunately been present at the autopsy an important fact in the case would have been wholly overlooked, and a clinical phenomenon of interest would have remained without satisfactory explanation.

(*To be concluded*).

CASES
ILLUSTRATIVE OF CEREBRAL SURGERY.

By WILLIAM MACEWEN, M.D.,
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CASE OF LOCALISED ENCEPHALITIS AND LEPTOMENINGITIS.

Summary.—Patient admitted with impairment of power in left arm, accompanied by muscular twitchings and pricking sensations in some parts: lesion diagnosed to be in upper half of ascending frontal convolutions: trephining: membrane-like patch over surface of brain involving arachnoid and pia mater along with external surface of grey matter: blood infiltrated into substance of brain in ascending frontal convolution: removal: reimplantation of bone: complete recovery.

F. N——, aged thirty-six years, a miner, was admitted into Ward 21, Glasgow Royal Infirmary, on November 27th, 1883, complaining of weakness, inability to work, and certain symptoms which were referable to the motor centres.

History.—He had been in good health until August, 1883, when by falling downstairs he was rendered unconscious, in which state he continued for about twelve hours. There had been a little blood about one of his ears, but whether this came from a superficial abrasion or was indicative of a more serious condition could not be ascertained. When he regained consciousness he found himself to be quite well, with the exception of experiencing a giddy sensation when he attempted to walk. He could move his arms and legs freely, he had full possession of sight, hearing, taste, and smell, and he believed himself to have quite recovered from his fall. Soon afterwards he attempted to work, but found that he was too weak to do so, and as time passed, instead of getting stronger he became weaker, and he therefore sought medical aid. He ultimately came to Glasgow, and was admitted into the medical wards of the Glasgow Royal Infirmary on September 18th, 1883, eighteen days after the accident. From the resident assistant the following was learned concerning his state at that time. He had partial right-sided facial paralysis. It was not clear whether this paralysis was due to a cerebral or a peripheral cause—some interference with the facial in its course through the temporal bone. Though the patient complained of weakness, no impairment in sensation or motion was detected over the trunk or limbs. He was treated by a series of blisters over the temporal region and rest. When he left the medical wards there was an improvement in the state of his face, though he remained otherwise in much the same condition. After getting home he repeatedly attempted to work, but found that he was quite unable to do so—first, from a feeling of general weakness; second, from a feebleness in the left arm; third, from a vertigo which came over him when he assumed the upright position, after stooping, or when he made any sudden movement; and fourth, from a general sensation of oppression, which he referred to his head. He also found that he was falling off in flesh. Some time afterwards he sought admission, on the advice of his physician, to the surgical wards of the Royal Infirmary. He was admitted to Ward 21 on Nov. 27th, 1883, twelve weeks and four days after the accident, his condition then being as follows:—He was a tall strongly-built man, having a shrunken and careworn aspect, his features being rather pinched. There was a trace of right-sided facial paralysis evinced by a slight passivity of expression, which was confirmed when he attempted to elevate his eyebrows. Occasionally the muscles on the right side of his face twitched. The pupil of his right eye was sluggish, responding feebly to light, so that when exposed to the full light of the window, it only contracted to about half the extent of its fellow. There was no external mark of injury on his head, though he complained of a feeling of weight and oppression in it, which, however, was diffuse. The muscles of his arms were well developed, though soft, and those of his left arm seemed slightly wasted. The power of grasp of his left hand was very feeble. The muscles of his left arm were frequently spasmodically jerked, and he experienced pricking sensations from the shoulder down to the fingers. He preferred not to hold anything breakable in his hand, because he said that "he could not trust it," as he was liable to drop anything which he might have in it. Though he had this want of confidence in his hand, he did not let anything fall while under examination. The condition of the arm as to want of power and the twitchings in the muscles were becoming steadily worse. When he stooped and rose quickly and then tried to walk he staggered, and he said that he felt giddy for some time afterwards. His temperature was occasionally slightly above normal. His lungs, kidneys, and other organs were sound. The head was shaven and another examination was made, but no sign of injury or abnormal irregularity could be detected.

From the history, as well as from his condition at the time of the examination, it was obvious that there was a lesion of the motor cortex in the upper half of the right ascending frontal convolution. As to the pathology, it was probable that irritation had been set up round an extravasation of blood which had taken place into the brain cortex at the above point as the result of a cerebral contusion. From the time that had elapsed since the injury, the extravasated blood would have undergone secondary changes, and it was probable from the increase and progress of the symptoms described as affecting the left arm that the irritation was of an inflammatory nature, although there was no pus production—a localised encephalitis, and probably a leptomeningitis. The former facial paralysis was probably due to an injury of the nerve, and not to a central cause. As counter-irritation had been employed for a considerable period without effect, it was not deemed expedient again to have recourse to it, more especially as it could not influence the blood effused. Dr. Robertson was asked to see this patient, and quite concurred in the diagnosis, and in the necessity for operative treatment. The patient was very desirous that something should be done to alleviate his condition, as he found himself totally unfitted for work, and felt that he was daily becoming worse. When it became known to him that his brain might be operated on for the relief of his symptoms, he eagerly begged that it should be done.

Operation, December 8th, 1883: The patient was placed under chloroform and a portion of the right parietal bone was removed, about one inch behind the auriculo-bregmatic line, and one inch above a line drawn from the external angular process of the frontal to the upper angle of the lambdoidal suture. A circular portion of skull was elevated one inch in diameter, exposing the middle of the ascending frontal and parietal convolutions. The disc of skull elevated was somewhat thinner than usual, and its internal table was slightly eroded. The dura mater, instead of presenting its usual smooth glistening appearance, had an irregular roughened surface, and was of a yellowish-grey colour, with here and there a dark patch indicating blood-clots in the subdural space. It was closely adherent to the skull round the margins of the trephine aperture. A crucial incision was made into the dura mater, when a considerable quantity of clear fluid along with some clots of blood about the size of a large bean escaped. Other clots had to be removed, as they were adhering to the structure underneath. After taking away these clots there were no brain pulsations visible, and the surface which then presented itself was of a somewhat yellowish colour, having an opaque dense aspect, and being adherent to the tissues underneath. This membrane-like patch lay chiefly over the ascending frontal convolution, dipping down into the fissure of Rolando. An incision was made through this layer, when it was seen to be about an eighth of an inch in thickness, and to be probably composed of the arachnoid, pia mater, and the superficial portion of the cortex, all of them fused together by plastic exudation, so as to resemble a single dense membrane, the various layers of which could not be differentiated. The underlying brain tissue in the upper part of the ascending frontal convolution was infiltrated with minute blood-clots, some of them about the size of a pea, others that of a barley grain. Till this incision was made through this membrane-like patch into the brain substance there were no pulsations visible; but when this was done the pulsations became distinct, and at the same moment many of the little clots, along with a quantity of serum, became extruded from the brain tissue, many of them coming from some depth, apparently helped to the surface by the cerebral pulsations. These clots were of a yellowish-brown colour externally, and when broken their interior was still black. A short time was given to permit the brain impulses to complete this extrusion, after which, as a few clots could still be discerned in the interior of the brain, they were gently loosened, when they were quickly extruded by the same movement. After all the clots were removed, a minute vessel on the brain surface continuing to bleed, pressure was exerted for a minute, which completely occluded it. The brain substance at this part seemed softer than normal, and was of a yellowish-brown colour. The dura mater was replaced, and the disc of bone which had been removed, and which had its periosteum entirely stripped off, was divided into several portions, and reimplanted in the aperture in the skull, a small opening being left at the side for drainage. The scalp was brought together with chromic gut, a decalcified chicken-bone tube being placed between the scalp and the skull for drainage. The entire operation was done under the carbolised spray, and eucalyptus dressings were applied. Forty-eight hours afterwards the wound was redressed, when a slight blood-stain was found on the dressing. Three weeks afterwards the wound was examined for the second time, and found healed. The patient's highest rectal temperature was 100·4° F. He never had a bad symptom, felt perfectly easy, and the only difficulty experienced was in persuading him to remain in bed, and in preventing him from indulging in other than low diet. The skull was firm over the trephine opening, into which the bones had been reimplanted. At the end of forty-eight hours there was almost a paralytic state of the left arm; he could not move the fingers. At the expiration of a week, when the arm was permitted to be examined for the second time, this had quite gone. His fingers were moved freely, and he could raise his arm and flex all the joints freely. From the third day after the operation there were no jerkings in the muscles of the arm. At the end of six weeks he had improved greatly in strength generally, and he declared that his left arm was as strong as ever; certainly it had gained greatly in strength. He was now eager and anxious to be permitted to get out to work. He was dismissed at the end of two months. Eight months afterwards he reported himself as regularly at work and in excellent health, the power of his left arm having been quite restored.

(To be concluded.)

A CONTRIBUTION TO THE

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D. LOND.

(Continued from page 840.)

No. II.—THE PHYSIOLOGICAL AND CLINICAL ASPECTS OF THE BILE SALTS IN THE URINE.

I. *The bile salts are increased.*—My clinical experience has demonstrated an excess of biliary salts in the urine in the following morbid conditions:—

1. *Jaundice.*—Authorities are divided on the question of bile salts in the urine of jaundice, some (such as Frerichs, Städler, Murchison) holding that they are invariably absent, believing that they are decomposed by the blood; others (Kühne) always detecting them, whatever the form and the duration of the jaundice, and others (George Harley) asserting the presence of them in all cases of obstructive jaundice, while, in fact, bile is being secreted by the liver and absorbed into the blood, but failing to discover them when the liver, from disorganisation, ceases to secrete bile. All this diversity of opinion must, I think, be referred either to the defectiveness of the processes hitherto employed for the separation of the bile acids from the urine, or to the want of a clinical test of sufficient accuracy and delicacy. So far my experience agrees with that of Kühne; for I have invariably found an increase, and generally a very decided increase, of the bile salts in all forms and stages of jaundice; this even in cases of from one to four years' duration. According to my experience of jaundice, the bile salts are not only apt to appear in the urine in increased quantity before the appearance of bile pigment, but to persist for some weeks after the urine has become quite free from it. In several cases I have found the peptone test of considerable practical value in affording an early intimation of the presence of conditions favouring jaundice, which was apparently averted by prompt treatment. Only lately I came across such a case, when I expressed a fear that jaundice would follow; I was then told that the patient was jaundiced under like circumstances six years ago. A full dose of calomel and colocynth followed by sulphate of magnesia, however, brought away a large quantity of what had all the appearance of pent-up biliary matter, and the patient gradually convalesced without the supervention of jaundice, the urine the while presenting a diminishing charge of bile salts, until at last it became quite normal, and the fæces assumed a healthy apperance. The test has also proved useful in my hands in indicating when a case of jaundice, after the ordinary bile flow into the bowels has taken place, may be considered fairly out of the wood, and when the liability to relapse may be regarded as unlikely. This pale urine was passed by a patient six weeks after the bile appeared freely in the evacuations. Yet it contains, as you observe, over 100 per cent. increase of the biliary salts. The patient is now, however, quite well.[1]

2. *Functional disorders of the liver: biliousness.*—The bilious may be broadly divided into two classes—namely, those in whom the liver is loaded with biliary products, either from habitual per-secretion, or from an accumulation of them, which is less or more constant, or is only occasional; and those in whom the secretion of bile is always below the average—sub-secretion.

Acute biliousness.—Those who always "make" bile, as well as those who suffer from biliary engorgement due to defective excretion, &c., are prone to "hepatic storms" or periodical overflows of bile either into the bowels or the blood, or into both; as when there occurs a sudden alteration of arterial tension,[2] as a rise from excitement, or a fall from chilling or other meteorological influence, or when a dietetic error is committed. Then, when the bile derivatives are absorbed too freely into the blood, as they generally are, the symptoms resemble those of acute poisoning by small doses of the bile salts in animals—namely, feeble pulse, pallor, coldness of the extremities, and a feeling of chilliness throughout, from imperfect filling of the arterioles; slow, sometimes gasping breathing; nausea and vomiting, and occasionally diarrhœa. In migraine these symptoms, which characterise the ordinary forms of acute poisoning by the bile salts, are overshadowed by the painful disturbances of the fifth and of the optic nerves; neurotic effects which *may* spring from the same central cause; but in these cases the attack is probably preceded or accompanied by an arrest or a diminution of the renal elimination of the biliary salts, followed by an augmented discharge which affords immediate relief.[3] In an ordinary attack of acute biliousness the bile salts flush the blood and are eliminated in increased quantity, and more particularly so towards the close of the disturbance. Acute bile-acid poisoning may, however, go beyond the stage implied by the ordinary bilious attack; it may even become so intense as to induce convulsions—which, however, as a rule, subside as the suddenly induced excess of the colourless bile product in the blood is cleared away, either by the kidneys, or by the bowels or by the skin; such a severe disturbance is apt to follow an excessive indulgence in alcohol, or the taking of some indigestible article of diet, or of too large a meal.

Chronic biliousness is also a cause of an increased systemic diffusion of bile salts, and the excessive renal elimination of them. Then the disorder is, as a rule, not purely functional, but depends on hepatic congestion induced by alcohol:[4] the initial stage of cirrhosis, by too good living, or by some obstruction to the portal circulation, as in heart disease, or by the congestive effects of malaria on the liver and spleen. Cases of chronic biliousness are, however, now and then met with which, though providing an excess of bile salts in the urine, do not exhibit the ordinary signs of hepatic congestion, and are not referable to the causes just indicated. But chronic biliousness perhaps, in the majority of cases, arises either from subsecretion of bile or the retention of biliary elements in the blood. When constipation is a prominent feature in a case of biliousness, as it frequently is, the bile salts will be detected in greater excess than when the bowels are regular or free; and this is not surprising, for constipation means retention of bile about the portal system, favouring as it does a retarded flow in the bile-ducts and absorption of cholate of sodium contained in the contents of the small intestines and in the fæces.[5] In any case of hepatic disturbance whenever the edge of the liver is to be felt below the margin of the thorax, and is sensitive to the touch, or when, without obvious enlargement of the liver, the fingers pressed well under the lower right ribs elicit tenderness, bile salts in excess will in all probability be discovered in the urine. But, on the other hand, these constituents are frequently found in excess without there being any tenderness of the liver. In chronic biliary derangement I have frequently found the bile salts in greater excess in the urine voided during the period of digestion than in that discharged before meals—e.g., two hours after breakfast than on rising. The urine of hepatic embarrassment, producing acute and chronic biliousness, is that of subjaundice—a minimal form of jaundice, which, like the major form, is characterised by a surcharge of bile derivatives in the blood and the elimination of them by the kidneys, but differs from ordinary jaundice in furnishing urine which not only contains a smaller proportion of bile elements, but always presents an excess of the biliary salts, while it is only occasionally pigmentous.

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[1] According to my observations, jaundiced urine is but a portion of the large group of urines containing biliary matter in pathological problems. Hence I venture to use the term "choluria," in order to [illegible] indicate the presence of the colourless bile elements in abnormal quantity in the urine.

[2] Variations of arterial and venous tension disturbing the biliary secretion is a matter of interest in practical medicine. The physiologist knows that the secretion of bile is increased by injecting blood into the veins, and diminished by bleeding or by compression of the aorta, and by obstructing the portal vein. All this has an important bearing on the pathological phenomena of the liver and the treatment of them. How often does a judicious attempt to raise the arterial tension in subcholia do more good than the whole battery of cholagogues, the poor anæmic liver rising to a higher standard of work in proportion as its blood-supply is improved?

[3] During the course of an attack of migraine I am inclined to think, from what I have observed, that there is in the typically neurotic forms of this ailment a check to elimination; then there occurs a flush by some channel—such as that of the kidneys, the skin, or the bowels—which brings heavenly freedom from the grip of the enemy. Sleep in many cases, and remedies addressed to the neurotic state in others, favour the freedom. This is a large subject, and can only be lightly touched in passing.

[4] I have found the peptone test very useful in detecting the abuse of alcohol. It would seem as if the urinary bile salts rise in quantity in the early stages of hepatic congestion from alcohol—in fact, before any enlargement can be made out or any tenderness can be detected.

[5] I have, however, every now and then discovered a decided excess of bile salts in the urine in cases of biliousness with free alvine evacuations, these being quite loose and bright-yellow, as if the biliary elements overflowed into the blood as well as into the bowels.

3. *Diseases of the liver apart from jaundice.*—I have found an excess of bile salts in the urine of carcinoma, amyloid disease, enlargement of the liver generally, cirrhosis, and in that of tumours probably hepatic. In passing diseases of the liver, such as hepatitis, I am disposed to think the peptone test will prove of some clinical value in showing when the liver has become completely restored.[6]

4. *Diseases of the spleen.*—In several cases of choluria the liver was enlarged as well as the spleen, but in two the enlargement was confined entirely, or almost entirely, to the spleen;[7] but notwithstanding the absence of definite hepatic disease, the bile salts appeared in the urine of these cases in large excess, associated with a little albumen, and they were not accompanied by bile pigment. Here is a good specimen voided by a patient under treatment; it is not pigmented, and it contains 300 per cent. increase of bile salts; the patient has a large spleen from ague, but he has no hepatic enlargement; in fact his liver appears to be below the normal size. This clinical fact appears to me noteworthy in connexion with some experimental data bearing on the relative amount of bile salts present in the splenic pulp and in the parenchyma of the liver, which will appear in the addendum to this paper.[8]

5. *Fever.*—A rise of temperature from whatever cause always induces a systemic excess of bile salts. With a temperature of 104°, and without any suspicion of liver affection, I have known the renal elimination to exceed 400 per cent. increase over the normal standard. Even a slight rise, such as that of 1° or 2°, increases the renal discharge of these elements. I need scarcely mention the intimate pathological connexion that subsists between the turgescence and consequent activity of the spleen and fever. This fact, viewed by the side of the urinary excess of bile salts in fever as well as in splenic disease apart from fever, is interesting when we attempt to take into consideration the probable causes of the prominent symptoms of the febrile movement, especially the prodromal ones. Some, such as chilliness and even rigors, nausea, vomiting, diarrhœa, epistaxis, convulsions, and the miniature clonic contractions of subsultus tendinum, I am disposed to refer to an excessive charge of bile salts in the blood. But how are the rheumatic symptoms — aching of the back and limbs, severe muscular and even articular pains—to be accounted for? The spleen also suggests an explanation, for according to physiological observation it would seem as if the splenic pulp were the birthplace of uric and other organic acids—such as lactic, acetic, butyric, formic, and succinic. In connexion with this point perhaps I should state that on using a sensitive litmus paper I have always found the splenic pulp of the freshly killed animal distinctly acid; and the same observation applies to the human spleens, which I have examined twenty-four hours after death, and to the recent decoctions of spleens and livers of man and animals.

6. *Hæmolytic diseases.* — Dissolution of the blood—and especially of red discs—obstruction of the capillaries, and hæmorrhages are prominent facts in the poisoning of animals by injecting bile salts into their veins. On turning to clinical experience we find the counterpart of these experimental data.

(*a*) *Anæmia.*—In anæmia the balance, which in health is maintained between the generation and the destruction of the blood-corpuscles, is disturbed. There would seem to be either a failure in the hæmogenesis, or an increase in the hæmolytic process; determining, as the case may be, a hæmogenic or a hæmolytic form of the ailment. Probably the defect is generally on the side of construction; but I have met with several instructive examples of the hæmolytic type, in which there was a considerable excess, pretty regularly and persistently maintained, of bile salts in the urine; then it was that some attention to the portal organs was indicated, and was of greater service than the ferruginous treatment of the blood state, the pernicious work of the liver apparently causing the failure. I suspect that arsenic is a valuable remedy in some of these cases of hæmolytic anæmia; purgative doses of the sulphates are certainly useful. The following figures indicate the range of increase of the urinary bile salts which I have recorded in this form of anæmia: 400, 300, 60, 100, 300, 60, 60, 400.

As yet I have not had opportunities of studying, in connexion with the bile salts, *pernicious anæmia* and *progressive anæmia*, which has a *primâ-facie* resemblance to the pernicious form.

In *splenic leucocythæmia* there is a large excess of the biliary salts in the urine. Here is a sample of the urine of a case in the London Hospital; it has a specific gravity of 1009, and contains a little albumen, and you observe that it is quite pale, free from biliary pigment, and that it is charged with as much as 750 per cent. increase of the bile salts, for eight minims of it produce the same degree of opacity with sixty minims of the peptone solution as do sixty minims of healthy urine.

In *malarial anæmia* (in cases even that did not present recognisable enlargement of the liver or spleen, or other organic changes) I have found a marked increase. This is the urine of a case of malarial anæmia in the Charing-cross Hospital; it contains, as you observe, over 300 per cent. increase of the biliary salts.

(*To be continued.*)

CASES OF LITHOTOMY IN THE ADULT,

WITH REMARKS.

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CASE 1. *Four large calculi and one small one removed by the median operation.*—Stephen H——, thirty, a well-made man, was admitted into the London Hospital on Dec. 19th, 1871, in a very critical condition. At first he affirmed that his illness only dated back for four or five weeks, but subsequently, on cross-examination, it was ascertained that suspicious symptoms had existed for some years. Occasionally, after exertion, blood was found in the urine, and at varying intervals he was obliged to lie up for a few days; a bottle of medicine, however, soon set him right. For some time he had experienced an itching sensation at the end of the penis. When he ran about or jumped he felt "something move in his inside," and such exercise was followed by the appearance of blood in his urine. His urine never stopped suddenly while micturating, but he had often felt pain after the act was completed. The pain would extend round his loins, and his testicles would be drawn up. Five weeks before admission he caught cold. He then noticed a discharge from his urethra, and, finally, he suffered from retention, for which he was attended by his club doctor. He had retention four times before admission, and on each occasion a catheter was passed. His urine was exceedingly thick, so that, according to his own account, "you could stand a stick up in it." On one occasion blood came away when the catheter was introduced.

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[6] In the discussion which followed the reading of this paper, Dr. Clifford Allbutt related the case of a convalescent from hepatitis sent to him for his opinion as to the recovery of the liver, and the advisability or otherwise of the patient's return to his employment. "On using the peptone test," said Dr. Allbutt, "a large precipitate appeared, and I felt justified by the information thus provided in reporting against the complete restoration of the liver, and in advising a further reprieve from work."

[7] Of course splenic enlargement does not necessarily imply increased activity of splenic function. As this paper is passing through the press I come across a good example in a patient of Dr. Ward's, of Harrogate. There was no choluria, though the spleen was found post mortem considerably enlarged; the portal and splenic veins were embedded in a mass of matted-up and thickened glandular tissue, and were clearly obstructed, for no blood issued from the portal vein on section; the liver was highly anæmic and fatty, the bile-ducts were entirely bileless, and a decoction of the parenchyma of the liver afforded a mere trace of bile salts. This case was, as it were, a beautiful and neat experiment planned by the hand of nature to shut off the products of spleen work from the liver and the systemic blood.

[8] Inasmuch as in experimentation with bile salts injected into the veins of animals the serum becomes loaded with fatty molecules, it is interesting to note some observations on this point in various cholæmic diseases, made by competent observers long before the cause of the fatty serum was apparent. Traill, over forty years ago, remarked on the creamy or milky serum of hepatitis, and on several occasions showed that the turbidity was due to a large quantity of fat. In inflammation of the spleen (lienitis) the serum was observed by Cullen, Testa, and Heusinger to be turbid from fatty matter. Simon, in his "Animal Chemistry," gives many interesting analyses of the blood of fevers, inflammations, jaundice, &c.—all these being cholæmic diseases—showing an excess of fat. Then, again, in leucocythæmia (another cholæmic disease) the blood is distinctly increased (Robertson and Isambert).

Ten days before he came to the hospital he had a rigor, which lasted half an hour.

On admission he was found to be the subject of phimosis. The end of the penis was acutely inflamed, very œdematous, and displayed one or two blackish sloughy points. A muco-purulent discharge issued from the urethra. His urine was passed very frequently in gushes and had a highly ammoniacal odour. It was tinged with blood, had an alkaline reaction, and a specific gravity of 1012, and contained a trace of albumen, epithelium, blood, lithates, phosphates, and pus. He had little, if any, suspicion that he was the subject of a serious affection of his urinary organs. His belief was that he would be well in a day or two, but his aspect belied it. His countenance wore a very anxious expression; his lips were covered with herpetic spots; his tongue was dry, brown, and coated. He was thirsty and feverish. Pulse 120. Temperature 101·6°. A No. 6 silver catheter passed by the house-surgeon, Mr. Beech, into the bladder was so firmly gripped that it could not be rotated. On its withdrawal a clot of blood issued from the urethra, followed by a mass of yellow gelatinous matter. He was ordered a warm bath, and he said it "did him a deal of good," as it brought away a quantity of urine and muco-purulent discharge. On further examination I found that the catheter grated over something rough in the urethra beyond the triangular ligament, and with the forefinger in the rectum I detected a hard body just in front of the prostate, not appreciably movable. This was diagnosed as a stone which had escaped from the bladder and become impacted below the urethral canal.

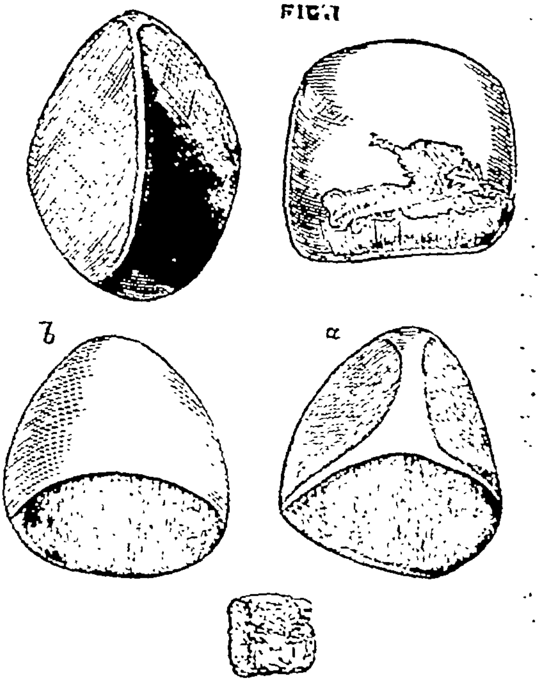
On December 20th Mr. Hutchinson saw the patient with me, and it was deemed advisable to undertake an immediate operation as affording him the best chance of recovery. Accordingly the patient was taken to the operating theatre and placed under the influence of chloroform. The staff was taken by Mr. Hutchinson. I opened the urethra by a median incision, introduced a pair of urethral forceps, and readily extracted a small stone. My fingers passed forwards into the prostate gland, hollowed out by the destruction of its tissue, and, reaching the neck of the bladder, came into contact with some larger stones. Mr. Hutchinson, who also examined the parts with his fingers, remarked that there was "a quarry." The presence of other stones had been indicated by smooth facets on the small stone first extracted; a pair of forceps was introduced, but as the stones were large, it was found necessary to enlarge the wound in the urethra. Then I extracted the stones in quick succession, washed out the bladder, and introduced a sponge-tube. The mucous membrane of the bladder appeared to be much thickened. There was very little hæmorrhage during the operation—none afterwards.

On the following day (Dec. 21st) the patient appeared to be much better, and expressed himself as comfortable and free from pain. He had had a good night, and was sanguine of a speedy recovery. The tongue was still dry and brown; the pulse about 130; temperature 100·5°. Some urine passed by the natural route.—22nd: Much better, and thought he could eat some chicken and oranges, which were ordered accordingly. Had slept well during the night. Bowels opened freely. The tenderness over the hypogastric region which had existed before the operation had disappeared. Urine passed through the penis. Pulse 130; temperature 100·5°.—23rd: Had passed a good night; said he could eat more. Urine still thick, some coming through penis and some through tube. Pulse very quick and weak; temperature 100° to 102°.—24th: Tube removed. Not so well. Had passed a good night, but perspired a good deal, and a profuse purulent discharge issued from the urethra; mouth very dry and parched; countenance anxious; pulse could scarcely be counted; temperature 102° throughout the day. In the afternoon he rallied, took his food again, and had a long sleep.—25th: Not nearly so well; had a disturbed night; breathing quicker and shorter; pulse still very small and rapid; countenance anxious with rather a vacant stare. In spite of the urgency of his condition he ate a hearty dinner at one o'clock. During the afternoon he became worse, and died at 11.55 P.M.

He had no rigors after the operation. He was sick once soon after it was over, possibly from the chloroform, and once the next morning. The other symptoms were fully explained by the condition of the urinary organs found after death.

Necropsy.—On opening the abdomen Dr. Sutton said that the peritoneum had a greasy appearance, and pointed out a red congested line on the edge of the intestinal coils, especially apparent in the upper part of the abdomen. These he regarded as indications of impending peritonitis. There was not, however, any trace of effusion into the peritoneal cavity, and the peritoneum covering the back of the bladder and the front of the rectum retained its natural lustre. The bladder was contracted. Its mucous membrane was much thickened, highly pigmented, and of a bluish-black colour with here and there whitish patches as if due to the deposit of phosphates from the urine which had been loaded with them during life. The muscular tunic was thickened. The prostate was hollowed out into a ragged cavity containing purulent matter, the floor of the urethra and the veru montanum being destroyed. Some pus was found in the fascia bounding it on the left. The left ureter was very much dilated, about three-quarters of an inch in diameter, and opened into the bladder by a wide orifice in the centre of a large papillary eminence which projected into the bladder, and apparently resulted from chronic thickening of the mucous membrane and the muscular fibres connected with the duct. The mucous membrane lining the ureter and pelvis of the left kidney was thickened and the seat of pigmentary deposit. The pelvis of the left kidney was much dilated, and the infundibula and calyces could be traced outwards, forming a number of culs-de-sac encroaching on the cones. These pouches and the pelvis itself were full of thick gelatinous, muco-purulent matter. The cortex was in a state of atrophy. The right kidney presented in a minor degree appearances similar to those in the left. The cortex was contracted, two of the cones obliterated and muco-pus was found in the pelvis and calyces. The right ureter was only slightly larger than the left. The lungs were much congested and emphysematous. The pericardium was healthy. The left ventricle was firmly contracted. The brain was healthy. The annexed woodcut (Fig. 1) will show the size of the calculi. Their united weight on removal was two ounces and three-quarters. In each of the large calculi there is a nucleus of urate of ammonia mixed with a large proportion of oxalate and urate of lime. Upon this is deposited phosphate of magnesia and ammonia containing a small quantity of phosphate of lime. The outer layers consist chiefly of phosphate of lime alternating with thin layers of urate of ammonia. The central portion of the large calculi resembled in appearance, structure, and size the small calculus. The exact similarity of structure shown by the calculi may possibly indicate that all the four larger ones were formed simultaneously. The calculi are in the museum of the Royal College of Surgeons of England.

FIG. 1



Remarks.—A noteworthy feature in the foregoing case is the slight amount of constitutional disturbance and local pain or discomfort occasioned by the calculi. They must have been in the bladder for some years; and it was not till the smallest one descended, entered the urethra, caused destruction of the prostate and ulceration of the urethra, that sufficient inconvenience was occasioned to necessitate admission into the hospital. There was no evidence of the patient ever having been sounded, or the existence of calculi suspected by his previous medical attendants; and he was admitted in a most precarious, and, as the issue proved, a hopeless condition. The kidneys had already been greatly damaged and the secreting structure spoiled by backward pressure and chronic inflammation, and an abscess had formed in the pelvic fascia outside the disorganised prostate gland. Had the calculi been found a few months earlier, in all probability a fatal result might have been averted. As the case stands, the death cannot in anywise be attributed to the operation, which was in every way beneficial. It placed the patient in a condition of comfort and ease, although unavoidably it came too late to be of permanent advantage.

(*To be concluded.*)

CASE (UTERINE) ILLUSTRATING THE ACTION OF DIGITALIS AS A DEPRESSO-MOTOR.[1]

By J. GORDON BLACK, M.D. Lond.

We are all no doubt agreed as to the great value of digitalis as a cardiac stimulant and contractor of the arterioles, and in materially increasing the blood-pressure in all parts of the circulation. Probably no day passes without our feeling thankful for the aid which this useful drug affords when various little peculiarities of its action are thoroughly understood. As a depresso-motor, however, having a special power over the inhibitory reflex ganglia of the spinal cord, I fancy digitalis is not so generally employed. About twenty years ago, I remember seeing cases of delirium tremens treated with large, or what one may call depresso-motor, doses of digitalis. For example, half an ounce of the tincture would be given several times during the day or night, and had an excellent calming effect upon over-excited nerves and exhausted reflex centres. No doubt this method of administration is familiar to all; but judging from my own experience such a use of the drug is more occasional than common. Perhaps there is a latent dread of untoward effects, and thus one prefers to use the more familiar bromide of potassium or hydrate of chloral to control the disordered reflex manifestations. The following case seems happily to illustrate the power of digitalis, even in comparatively moderate doses, to stimulate exhausted inhibitory centres.

About two years ago I was sent for, late one night, to see a young married lady, staying in lodgings with her husband. Before reaching the house I heard shouts and screams, which I was told emanated from the patient. I found her in bed, throwing her arms and limbs about in a state of the wildest maniacal excitement. At the top of an unusually loud voice she was ordering her husband, or the maid, to get her beer, brandy, or morphia by turns. Had it not been for one symptom which arrested my attention in the act of walking across the room to the bedside on my entrance, I should certainly have felt inclined to ascribe the appearances before me to alcoholic excess. The emphatic signal which, however, at once awakened all my medical sympathies was that of well-marked risus sardonicus—the ghastly grin of the baboon, with the angles of the mouth drawn downwards and outwards, as if by tightened cords. Here was, therefore, no ordinary case of drunkenness or alcoholic mania, but one in which the fountains of the nervous system were seriously implicated. But for this invaluable hint the diagnosis, amid the incongruous surroundings of the sufferer, would have been a labour indeed like unravelling the Gordian knot. Hysteria there was of the most pronounced character. The patient had been addicted for upwards of two years to the hypodermic use of morphia. It had been originally ordered by a medical man for the relief of severe hypogastric and inguinal pain. There was now hardly half an inch of space down the outer side of one lower limb, from the hip to the ankle, where the morphia needle had not penetrated. She even boasted of her skill in operating without leaving a mark on the skin.

Such was my introduction to a very uninviting and apparently hopeless case. The utter degradation and loss of moral restraint in a woman, whom I afterwards found to be a lady of delicate sensibilities and proper conduct, could only be appreciated by actually looking "on this picture and on that." The patient was about twenty-nine years of age, and had been married ten years. She had been twice pregnant within the first two years of married life, but miscarried on each occasion at about the eighth month. The menses had always been regular up to four months ago, since which time they had not appeared. To make a long story short, I discovered that the whole train of symptoms in this case depended upon complete retroversion and flexion of the uterus, which organ was literally upside down, with an acute flexion about the site of the inner os. During the first twelve months of my acquaintance with this confirmed invalid the following forms of hysteria presented themselves at various times to my notice: double wrist-drop, so that splints down the arms were necessary to support the useless hands; loss of power to flex the body upon the lower extremities (she was thus unable to raise herself in bed from the lying into the sitting posture, and although she could sit when placed in a chair, by no effort could she stand up); intense salivation, with swollen gums and tongue, accompanied by horribly fetid breath; absolute aphonia for many days, followed by very considerable paralysis of the muscles of inspiration, the latter at one time being so serious that quantities of mucus collected in the bronchial tubes and trachea, causing the patient much anxiety from fear of impending suffocation; finally, the occurrence of an attack of catarrhal croup of unmistakable character.

Now, in this case, the only drug which seemed to possess power enough to control the disturbed action of the nerves and the maniacal symptoms was morphia. Under its soothing influence she was indeed happy and reasonable. So soon, however, as its effect had passed off she became a raving lunatic, disturbing night and day the neighbourhood where she lived, and for whom the appliances of a madhouse were devoutly desired by her medical attendant. Other medicines, such as the bromides, hydrate of chloral, chloroform, belladonna, quinine, tincture of iron, &c., were next to useless. I never knew bromide of potassium, even given in large doses, prove so utterly powerless. The patient was by no means a dipsomaniac; but, at times of excitement, alcohol was too freely taken in order to drown the sensations of nervine horror which enthralled her. To this end, however, it was only very partially successful; perhaps a little more so than the medicines just enumerated. Immediately on rectifying the malposition of the uterus, complete relief to the most distressing symptoms was attained. Whenever the womb was straightened and duly erected into a normal attitude, by means of a Graily Hewitt's stem pessary, the patient became a reasonable, controllable being, however outrageous her previous conduct might have been. This sequence, as cause and effect, was abundantly verified during the early treatment; for of course at first it was no easy matter to adjust an instrument capable of maintaining itself against the tension of ligaments and tissues contracted by long-standing error. Accidents would occasionally happen, and several times I found that the uterus had actually carried the pessary with it into an inverted position, the point of the stem being vertically downwards, whilst the base of the instrument was wrong side upwards. Under such adverse circumstances, the patient was evidently conscious of something having gone wrong, and very soon afterwards the characteristic risus sardonicus and the dreaded maniacal outbursts supervened, with a horror and thraldom upon her nervous system such as the sight of a spectral appearance might have caused. Under the mechanical uterine treatment mentioned this patient became practically well in the course of six or eight months. She was enabled to throw off the invalidism of several years' standing, and to walk abroad once more.

Thus far I have been obliged to describe this case in order that what follows as to the action of digitalis may be fully understood. About five months ago—that is, a year and a half after my first introduction to the patient, I was sent for one afternoon, in a hurry, to see her. On arrival, I saw again, to my intense chagrin, the spectral ghastly grin, maniacal rolling eye, and the furtive glance so well remembered; and though, as yet, the shouting demeanour was absent, there was the whispered entreaty for morphia, which she had not used for more than eighteen months. As if this were not discouragement enough, I discovered, upon vaginal examination, that the stem pessary which she continued to wear was not this time out of order. It was in perfect apposition, and erect in attitude. Independent of the treatment by pessary, nothing but morphia had been found able to moderate the violence of these outbreaks; and the employment of morphia I had rigidly forbidden on account of its pernicious effects on her constitution, moral and physical. The day was far advanced and night coming on, with the prospect of the household being turned into a veritable pandemonium. On casting about for some cause for this unpleasant return of her tormentor, I learned that the menses had been rather suddenly stopped by a chill. The left inguinal region was tender to the touch, whilst the left ovary, per vaginam, was felt to be swollen, and the slightest pressure over it was acutely painful to the sufferer. Here, therefore, appeared to me sufficient cause for the nervine disturbance. At least, careful inquiry could suggest no other. Whilst standing by the bedside, watching the vagaries of the patient, in a thoroughly crestfallen mood, the idea of digitalis suddenly struck me. How it was known to stimulate Setschenow's inhibitory ganglia at the upper part of the spinal cord, and, further, its sometimes happy effect when boldly administered in delirium tremens, recurred to my mind. The patient's pulse, too, was at all times high and feeble; but during hysterical paroxysms was even alarmingly so. Digitalis, therefore, being a powerful cardiac and vascular stimulant, seemed very appropriate. The result is soon told. I prescribed half an ounce of the tincture in a four-ounce bottle, with water; two tablespoonfuls (one-drachm dose of the tincture of digitalis) to be taken every hour. This was at five o'clock, and I did not see her again till between nine and ten o'clock. She was then quite calm and reasonable; a perfect contrast to her previous state. The four doses had all been taken. Previously the pulse had ranged from 120 to 130, and was very feeble in character, even at times difficult to detect. Now, on the other hand, it was steady and full, beating rather over 90 to the minute. On other occasions morphia alone had been able to break through the persistent sleep vigil; on this, however, the patient declared she felt drowsy and thought she could go to sleep. This result was happily realised, and an excellent night passed. Next morning she awoke refreshed, got up, and said she was quite well. Better still, she has remained so to the present date.

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[1] A paper read before the first meeting of the Harrogate Medical Society, Nov. 27th, 1884.

I would remark, in conclusion, that this case seems to teach a useful lesson regarding the value of digitalis employed as an alternative to agents such as hydrate of chloral, bromide of potassium, nitrite of amyl, Calabar bean, and others so generally used as controllers of disturbed reflexes. These otherwise useful agents tend unfortunately to weaken the heart's action and lower the circulation generally. In poisonous doses they arrest the heart in diastole, whereas digitalis, similarly administered, stops the heart in systole. Digitalis also slows the cardiac beat, whilst it increases the force and efficiency of the contractions. In suitable cases, then, we would do well to remember that these most useful therapeutic powers of digitalis are united to others equally potent and valuable, which give control over reflex nervine disturbances. The result of careful experiments appears to establish that this influence over the reflex centres, as well as over the spinal cord generally, is really independent of the characteristic effects upon the heart and the blood-vessels. The latter potentiality, however, may not improbably assist the former; consequently, where long courses of the bromides and other depresso-motors are found necessary, a combination with digitalis is suggested, to avoid any weakening of the circulation liable to be produced by the former agents. In this direction the character of the pulse will be found a proper guide, for, when full and strong, digitalis will not be needed; but, when feeble and frequent, such assistance would be evidently indicated. There are, on the other hand, occasional instances where medicines commonly relied on and found most useful as sedatives to spinal irritation, have failed; and in such, as in the case I have related, digitalis may happily prove invaluable as the last arrow in the quiver of the long-suffering medical attendant.

A NOTE AND A QUESTION ON SO-CALLED SURGICAL SCARLET FEVER.

BY HERBERT W. PAGE, M.A. CANTAB., F.R.C.S.,
SURGEON TO ST. MARY'S HOSPITAL.

"OUGHT an operation to be performed on a patient whom we know to have been recently exposed to the contagium of scarlet fever?" is a question which cannot very often have presented itself to a surgeon; but it occurred to myself not long ago in the following circumstances.

On Dec. 13th, 1884, I admitted into St. Mary's Hospital a patient with suppurating glands and old sinuses in the right groin, the result of over-exertion, and perhaps general ill-health. On Dec. 13th the sinuses were freely laid open under an anæsthetic, the operation being a somewhat severe one of its kind. On the 18th the temperature rose, and a red rash appeared on the chest and abdomen. This was followed by sore-throat and general extension of the redness, and no doubt was entertained that the patient had scarlet fever. He passed through a mild course of this disease and desquamated over the whole body; but there was little or no arrest in the healing of his wound, and he was discharged from the hospital in eight weeks. He was an intelligent well-educated man, aged twenty-eight, formerly an officer in the Navy, and had been taken into the hospital for special reasons. He was quite unaware of having been exposed to recent contagion, but was sure that he had had scarlet fever twice before, the last time seven years ago.

There attended on this patient a night-nurse and a day-nurse, both lady probationers in the hospital. On Dec. 27th the night-nurse, aged thirty-five, began with scarlet fever, and passed through a typical yet very mild attack. On Jan. 7th the day-nurse, E. P. G——, aged forty-seven, called attention to the fact that her left breast had been for some time very painful and was growing rapidly in size. I was asked to see her, and learned that for the last fifteen years she had had a small painless lump in the breast, that it had begun to increase in size nine months ago, and that for the last two months its growth had been much more rapid, with a considerable amount of pain. The breast was found enormously enlarged, and to be the seat of a tumour which, both from the history and the feel, was obviously a cystic adeno-sarcoma. I advised removal as soon as possible—that; at any rate, it should not be delayed beyond a week or ten days. On the following day her friends took her to see Sir James Paget, who further advised that she should leave the hospital for a few days before operation, so as to lessen the risks of her contracting scarlet fever, to infection from which she had been continuously exposed for the last three weeks. She had never had scarlet fever before. Accordingly, she left the hospital at once, and returned on the morning of Jan. 14th, on which day I had the advantage of talking over the case with Sir James Paget, who agreed in thinking that it was right, in the circumstances of the breast disease, to operate, although the chances of the patient developing scarlet fever were very considerable. On the afternoon of Jan. 14th I removed the breast under full antiseptic precautions, Listerian carbolic spray and gauze. The wound healed by first intention; and from that moment to her discharge from the hospital, on Feb. 9th, her temperature never rose above the normal. She did not contract scarlet fever.

Such is the bare statement of the facts, and it will be acknowledged, I think, that a question of unusual difficulty was submitted to the surgeon before operation. The fortunate issue of the case gives at any rate one answer to the question, that an operation may be performed with safety on a patient who has been recently exposed to the contagium of scarlet fever. Operations have doubtless been frequently performed without ill results on persons who have been so subjected to infection, although that fact was unknown both to themselves and the operators. I question, however, if an operation other than one of real urgency ought to be undertaken knowingly in like circumstances, and I must own that for some days after the operation on E. P. G—— my anxiety was not small that she would show evidences of the fever. The necessity and urgency of the operation had to be weighed against the risks of developing scarlet fever, and had any facts been at hand to tell that the patient would certainly show symptoms of this fever after operation, that there was, in fact, no possible escape for her from such a consequence, then perhaps it would have been right to postpone the operation longer, urgent though it was. But who could say for how long? There were no such facts to guide me, and I thought it justifiable to take the chance and do the operation.

The history of these three patients clearly shows how different is the susceptibility of different individuals to the poison of scarlet fever. The man who had had scarlet fever twice before gets a third attack within four days of an operation; from him one nurse soon catches the disease, and the other nurse, who was subjected to no less risks of infection and who had not had scarlet fever before, not only does not acquire it, but even undergoes a serious operation within a week of the time when she had been nursing him. It appears, therefore, that an operation, or the state of depression induced thereby, has not that power which has been attributed to it of permitting the development of scarlet fever in a patient who has been exposed to it, unless the patient has also a certain measure of susceptibility to the disease. Nor do I know how this is to be gauged, unless it be from the age of the patient and the absence of any previous history of scarlet fever. It is improbable that anyone can have reached middle life without having been at some time exposed to the risks of infection, and in the system of every individual there must be something to determine whether poison or system shall prevail, whether the poison which has entered in shall run its course, or be deprived of its potency and cause no symptoms. That different persons and different families show all degrees of susceptibility is of course well known, and the history of these three cases seems to point to individual susceptibility as having an all-important share in allowing the development of scarlet fever after operation. How widely different, for example, must have been the susceptibility in the man and in his nurse. This conclusion seems, however, to teach that an operation ought not to be undertaken in such circumstances as have been recorded unless there be some good reason for believing that the patient's susceptibility is only small. The question which begins this paper can, as has been said, very rarely present itself to a surgeon, and I can only suggest that when it occurs very careful inquiry should be made into the history of the patient and his family, that his age be noted, and the probabilities of his exposure to contagion, and his escape from its dangers during his previous life, be fully considered. And yet his previous escape may render him more liable to an attack now, and an operation may be the one thing needful to make him fall a victim to the fever. Not necessarily so, as the case in this paper shows; but there must be a risk, and it should be fairly put before the patient and his friends. Risk unavoidable; attack by no means inevitable; hope of escape well-grounded or the reverse, according to the age and previous history. These are the considerations which must be put before them, and which must be balanced against the measure of the urgency for the operation. How difficult it may be to arrive at a right conclusion is self-evident.

In a letter to me on the issue of this case Sir James Paget writes: "I wish we could have more of these negative facts; we have nothing to weigh against the positive evidences of the bringing out of previous infection." It is with the object of recording a negative fact of much interest and importance that I venture to publish this note.

NOTES ON

A CASE OF ABDOMINAL SECTION.

By C. A. BRODRIBB, M.R.C.S.

Mrs. F——, aged forty-one, a widow with six children, was about her household work, in her usual health, on May 24th, 1884. The next day she was seized with severe pain in the abdomen, with constant vomiting. The pain seemed most severe in the right lumbar region, over the ascending colon. She said she felt that "something had given way in her inside." I was sent for in the evening of the next day (the 26th). I found her in great pain, frequently retching; pulse 108, weak; skin moist and cool. I ordered her to take fifteen minims of tincture of opium in an ounce of chloroform water every four hours, to suck ice, and to apply warm flannels over the abdomen. The next day (27th) she was much the same, but an indistinctly defined swelling over the ascending colon had appeared, extremely tender to the touch. On the 28th I asked Dr. Bagshawe to see her with me. The swelling was more defined, pain intense, but very little vomiting. Pulse 108; temperature 99·5°. No motion and no flatus had passed since the illness began. Ordered half a pint of warm oil with a quart of warm water, as an enema; twenty minims of tincture of belladonna every four hours; extract of belladonna to be applied over the tender swelling, which now had a sharply defined edge below, ending upwards indistinctly. The enema washed out a little fæces and flatus. Dr. Bagshawe thought that the ascending colon had become strangulated by adhesive bands of lymph. So matters continued for the next two days; no motion or flatus passed, and the swelling became more distinct and more tender. On May 31st the case was obviously almost hopeless if left to itself, and it was plainly unwise to wait until the patient became feverish or collapsed. Mr. Travers also kindly saw the case on the 31st with Dr. Bagshawe and myself, and we all agreed that the only chance lay in abdominal section, with a view to release the strangulated bowel. Accordingly, that afternoon, Mr. Travers chloroformed the patient, and having rinsed my hands and the sponges in a little carbolic acid and water, I made an incision in the median line, about five inches long, from just below the umbilicus downwards. I carefully stopped all the little bleeding vessels by torsion before I opened the peritoneum, which I did, of course, upon a director. I then introduced my hand, and passing it on to the ascending colon, I found it surrounded by adhesions of recent lymph, which I easily broke down with my forefinger. I also found a distinct band of lymph transversely across the bowel, and I managed to get my finger under it and broke it. I then drew the bowel sufficiently towards the incision to be able to get a glimpse of it. It was deeply congested, but sound. I afterwards squeezed onwards the contents of the swollen gut, especially one or two hard scybala, and left it soft and gurgling. I found some little difficulty in preventing the bowels from protruding *en masse* through the incision, but with a little more care I was able to close it securely with two deep silver-wire sutures through the peritoneum and four superficial sutures of silk. I dressed the wound with a little piece of lint soaked in carbolised oil, and then put over it a good-sized pad of wadding, with strapping, and six yards of wide calico bandage. I then gave half a grain of morphia under the skin, and ordered nothing but ice by the mouth. The same night the patient passed flatus per anum, but towards morning she had frequent and copious stercoraceous vomiting; temperature 97°; pulse weak. I gave drachm doses of brandy every two hours, and she rallied, and took a little of Brand's essence of beef. For the next two days she continued to improve, and passed flatus freely; lost all pain and swelling in abdomen. On June 3rd she had a large enema, which gave copious relief; wound healthy and healing well. On the 4th she had a relapse, with pain in the epigastrium and temperature 102°, which I attributed to a small slice of roll injudiciously given by a visitor. However, this attack subsided, and on the 5th (six days after the operation) the bowels acted freely of their own accord, the temperature fell to normal, and the pulse improved. On the 6th I removed the sutures, as they caused a "pricking" pain, and I found the wound all healed by first intention. I continued of course to support it with strapping and bandage. I gradually improved the diet, and on the 7th the patient sat up. She is now (seventeen days after the operation) weak, but able to go downstairs, and is practically quite well.

The points of interest to be noted in this case are: first, the rarity of the operation itself in private practice, as it is generally only resorted to as a forlorn hope; secondly, the favourable result, without any special advantages, such as hospital treatment and nursing and antiseptic precautions. The cottage in which the patient lives is one of a row of little houses in a crowded part of the town not particularly clean, airy, or well drained. The operation itself presents no particular difficulty, and requires no great skill in the operator; and this case seems to show that the dangers of abdominal section have hitherto been somewhat over-estimated; and that elaborate antiseptic treatment (which cannot well be obtained at the homes of the poor) is not necessary. Cases of intestinal obstruction are sadly common in the practice of all medical men, and are almost always fatal. I venture to hope that my professional brethren may be encouraged by this case to endeavour to save life in such cases by operation when other means seem likely to prove of no avail.

I must not omit to add that my best thanks are due to Dr. Bagshawe and to Mr. Travers for their kind advice and assistance, and also to the good ladies connected with a church in the neighbourhood who so tenderly and skilfully nursed the poor patient day and night until she was well out of danger.

Hastings.

CASE OF MYXŒDEMA IN A WOMAN AGED SEVENTY-SIX.

BY C. W. SUCKLING, M.D. LOND., M.R.C.P.,
PHYSICIAN TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

L. L——, a woman aged seventy-six, was admitted into the workhouse infirmary on November 12th, 1884. Before I saw her the nurse of the ward told me that another case of myxœdema had been admitted, she having had one, which proved fatal, for twelve months under her charge. On hearing the patient speak I at once recognised the similarity of her mode of utterance and tone of voice to those of the other patient above mentioned, and it was in this way that the nurse detected the disease. No family history of importance could be elicited, and no history of trouble, want, or excess in any way could be obtained. She had been employed for years as a washerwoman, but lately had been too feeble to work. She complained only of coldness of the feet and weakness of the legs. She had had eight children; no miscarriages. She is a big, stout woman, with a heavy fatuous expression, the complexion is sallow with a circumscribed flush on each cheek. There is puffiness above and below each eyelid which does not pit on pressure. The nose is large and broad, and the alæ nasi thick. The lower lip is thick and protruded and somewhat cyanosed. There is hair on her upper lip and chin. The teeth are nearly all gone, the tongue and uvula large. The appetite bad. The skin is harsh, thick, dry, translucent, scaly, and wrinkled. She never perspires. Her limbs are large and there is a general œdema which does not pit on pressure, except in the legs and feet, where it does so slightly. There are thick swellings resembling fat above each clavicle. The hair is very scanty. The thyroid body cannot be felt although the rings of the trachea can be distinguished down to the sternum. The heart sounds are feeble, the pulse regular, small, feeble, and infrequent, 48 per minute, and there is certainly cardiac debility. The respiration is slow (13 per minute). She complains of a sensation of coldness in her feet, also of tingling, numbness, and formication in the hands and feet. Perceptions of pain and touch are retarded; localisation perfect. The pupils are unequal; they respond to light and accommodation. The hearing is very defective. Taste and smell normal. The reflexes are normal. She is slow in her movements, and fumbles in dressing herself; her gait is slow, with short steps. There is no agoraphobia or pain in the head. The speech is slow and drawling, and exactly resembles that of the other cases I have seen. Her intelligence appears fairly good; the memory is defective. She is slow of perception, and takes a considerable time to appreciate and answer a question. The temperature is below normal, ranging from 95° to 97° F. The urine averages forty ounces daily, contains no albumen, and its specific gravity is 1010. The percentage of urea estimated by Squibb's process is 1·15 per cent. For the last few days she has suffered from diarrhœa. She is very quiet and placid, and has had no fits or attacks of excitement.

This case is the third one of myxœdema that I have had under my care. All three have been women—two of them about the climacteric period of life. Two have proved fatal after being under observation for several months. In both of these fatal cases there were convulsions, shortly preceding death, which was by coma. In one of them delusions and attacks of temporary excitement occurred. In all the temperature was low, the urea diminished, and the heart feeble and slowly beating. In one of the fatal cases a gradual slowing of the pulse began two or three days before death, a few hours before death being 20 per minute, the patient at the time being comatose. No albumen could be detected in the urine examined shortly before death. Two of the patients were sisters. One of the patients fractured her patella; this was probably accounted for by the toneless condition of the extensor muscles of the knee, allowing the knee to give way suddenly, and the effort to recover herself fracturing the bone. I have tried jaborandi, nitro-glycerine, iron, arsenic, and baths in these cases without any appreciable benefit to the patient. The prognosis, in my experience, is of course very grave, the patient at any time being liable to a fatal coma. Dr. Oliver, in a clinical lecture on Myxœdema, called attention to a pause between inspiration and expiration as long as the sound of inspiration itself. This has not been present in the cases I have seen. West, however,[1] describes alterations in the respiratory murmurs, and says that Cheyne-Stokes' breathing has been observed in this disease. Many case of myxœdema have now been published, but I cannot find any case approaching in age this one.

Birmingham.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. GEORGE'S HOSPITAL.

A CASE OF FACIAL CARBUNCLE; DEATH; NECROPSY.

(Under the care of Mr. HOLMES.)

THE following case is a good example of the more severe variety of the disease known as facial carbuncle, death occurring as in the majority of these cases, which are happily uncommon, from pyæmia. No decisive opinion has been arrived at by the profession as to the exact relationship between this disease and true carbuncle, some considering it as the same, modified by position, others considering it to be allied to phlegmonous erysipelas. It will be observed that, in the case recorded phlebitis of the facial and other veins was noticed, preceding the more marked symptoms of pyæmia. In the diagnosis of this disease it is important to remember its resemblance in some respects to malignant pustule.

For the following notes we are indebted to Mr. H. W. Allingham, late house-surgeon:—

Bessie J——, aged twenty, single. Family history: Father died of bronchitis at a good age; other members of the family are alive and healthy. She had always had bad health, being very anæmic, and suffering from amenorrhœa. For this she had been to Eastbourne, and had only returned about a week previous to her admittance into hospital. On Dec. 23rd she complained of some pain in the left side of her upper lip, and noticed it to be very red on its inner aspect. Hot fomentations were used, but the swelling increasing a doctor was consulted, who ordered a poultice to be applied. Deriving no benefit from this treatment she was brought to the hospital.

Dec. 27th.—On admission she appeared very anæmic, the temperature being 105°; pulse 140. On the left side of her face, at the angle of the mouth, involving more of the upper than the lower lip, was a large reddish-blue indurated mass, about two inches in circumference; on this were six yellow points, from which pus could be squeezed. The rest of the side of the face was swollen, being hard and brawny, with neither sense of fluctuation nor œdema; upon this were two or three small boils scattered about. This swelling extended from the eyelids, which were thickened and closed, down to the angle of the jaw, and spreading slightly down the neck. Stimulants were given and five grains of sulphate of quinine every four hours.

28th.—The lip was still of a darkish hue, and more yellow points had made their appearance, those dotted about the cheek being very pronounced. Streaks were apparent, following the course of the facial vein and its branches, which felt like cords, being evidently due to phlebitis. The eyelids were more swollen; sordes on the teeth; tongue moist, but very dirty; skin dry. The patient was slightly delirious at night and complained of intense headache. Mr. Holmes made an incision about an inch in depth along the lip at the junction of the mucous membrane and skin, but only a little venous blood (no pus) came from the wound.

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[1] Boston Medical and Surgical Journal, vol. ii., page 80.

Temperature, morning, 104°; evening, 102°. Pulse in the morning, 140; evening, 136. Six ounces of port wine and five ounces of brandy were taken during the day, and an injection of a third of a grain of morphia was given at night.

29th.—The patient seemed much worse; the lip was bluish-black and in a sloughing condition; inflammation of the facial vein was still more marked; the eye was prominent and immovable, with a slight hæmorrhage under the conjunctiva on the outer side. The boil-like prominences about the cheek presented black sloughs on the surface. Tongue dry. Temperature, morning, 103°; night, 104°; pulse, morning, 156; evening, 140; respiration, morning, 52; evening 60. Some signs of pneumonia appeared in the left axillary line. About 6 P.M. she was delirious, having slight tremors of the right arm and leg, which continued up till 11 o'clock, when she died.

Autopsy.—The brain was soft and congested; the superior longitudinal, lateral, and cavernous sinuses, and left ophthalmic veins contained a dark, soft clot, friable, and in some places yellow and semi-purulent. A purulent disintegrated clot filled the entire length of the external and internal jugular veins. The pleuræ contained some fluid, and both visceral and parietal layers were covered with soft recent greenish lymph. The cut surfaces of the lungs were deeply congested; in the centre of the left were numerous scattered foci of suppuration, from the size of a sago-grain to a pea. The bronchi were congested and filled with frothy fluid. The liver, spleen, and kidneys were congested. There were no internal hæmorrhages or peritonitis.

RADCLIFFE INFIRMARY, OXFORD.

A CASE OF ATAXIC ARTHROPATHY: REMARKS.

(Under the care of Dr. BROOKS.)

W. C——, aged forty years, who works on a steam threshing machine, was admitted into the Radcliffe Infirmary on February 25th, 1885, with symptoms of œdema of the left leg, together with considerable effusion into the left knee-joint. He is an intelligent man and gives a clear concise account of his illness up to the present date. Two months ago he first noticed a swelling of the left knee, which gradually became larger and larger until it attained the present size. The swelling of the knee had been preceded by pains in both lower legs, which were of a gnawing character. These pains had been present at intervals for between two and three years. During the time the knee was swelling he did not suffer any pain in the joint, nor was it at all red or tender. When he bent his knee in walking he observed that there was a crackling sound produced in the joint. He noticed that his legs as he lay in bed would give occasional spasmodic jerks. Shortly after the knee began to swell he found that he could not walk steadily in the dark, but he considered that this was due to the condition of his knee-joint, which had made his leg somewhat weak. He, however, had not any difficulty in getting about during the day with the help of a stick. He had not felt any abnormal sensations in his feet, and could distinguish by means of his feet the character of the ground on which he walked. For six years he had been in the army, during which time he had not had occasion to go into hospital, although he had served three years and a half in Jamaica. He had not been subject to gastric crises. No history of syphilis could be elicited. From the nature of his work he is much exposed to the weather.

On admission the left knee and the upper two-thirds of the lower leg appeared considerably larger than the corresponding parts on the right side, the measurement over the left knee-joint exceeding that over the right knee-joint by two inches. The swelling at the joint consisted of a large quantity of fluid in the synovial membrane; the lower end of the femur and the upper end of the tibia were slightly and uniformly enlarged. The joint did not present any abnormal redness, and its temperature was the same as that of its fellow of the opposite side. The joint was quite smooth, and there were not any irregular nodules of adventitious bone. There was partial luxation of the joint inwards and backwards. There was considerable semi-solid œdema of the left leg below the knee-joint. On moving the joint loud crackling was heard, which was in fact perfectly audible to people two or three feet from the patient. The movement of the joint caused no pain whatever, even when the ends of the bones were forcibly approximated. The posterior surface of the patella when rubbed against the anterior surface of the femur felt rough. The ligaments of the joint, especially the capsular ligament, were very lax, and allowed the finger to be thrust into the joint between the ends of the bones. Lateral movement would be produced when the leg was extended. The patient could stand perfectly steady, with his feet together, and without any support, as long as his eyes were open. He walked with a firm step when allowed to spread his feet well apart from one another, so as to form a broad base for his body, and did not exhibit any incoördination that could not be accounted for by the state of the knee-joint. When he turned, he required some space to get round in, and was slow and awkward in executing the movement. When standing with his feet together and his eyes closed, coördination was distinctly less than normal, and he swayed considerably. On trying to walk along a line on the floor, his movements became markedly incoördinate. It was found that coördination was less interfered with when his boots were on than when his feet were bare. Patellar reflex was absent on both sides. Muscular power was unimpaired, and tactile sensation normal. The pupils were unequal, and did not respond to light. Accommodation could be readily performed, and was accompanied by contraction of both pupils. Sight was good both for colours and for type. By the ophthalmoscope it was seen that the discs were pale, but no distinct optic nerve atrophy was present. The control over the bladder and rectum was perfect. Since admission the œdema of the leg has become less marked, and there is slightly less synovial fluid in the joint. The crackling heard on moving the joint has gradually disappeared. The ligaments of the joint are very lax, and allow more movement than on admission. The incoördination, on standing with the eyes shut, remains as it was on admission.

Remarks by Dr. BROOKS.—The case is a good instance of ataxic arthropathy as described by Charcot.[1] The joint attacked is the one most commonly diseased in locomotor ataxia. The tumefaction of the joint first attracted the patient's attention and caused him to seek advice, but it is not possible to say how long the patellar reflexes had been absent before this. There was not any traumatic or other cause for the disorganisation of the joint. The arthropathy has occurred, as is commonly the case, between the prodromic and incoördinate periods of the disease. The presence of the Argyll-Robertson phenomenon at this stage of locomotor ataxia is in accordance with the statistics given by Gowers in his paper before the Ophthalmological Society.[2] One curious point I am at a loss to account for is the fact that coördination is more perfect when the patient has his boots on than when his feet are bare. The tumefaction of the joint, according to the patient's account, was much more slowly developed than in many of Charcot's cases.

CHILDREN'S HOSPITAL, NOTTINGHAM.

A CASE OF MENINGOCELE; OPERATION; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. LEWIS W. MARSHALL.)

C. B——, six weeks old, was admitted on January 30th, 1884, with a large tumour on the back of the neck, said to have existed at the time of birth, but on admission very much increased in size. The description given by the mother was as follows: It was about the size of an egg at birth, and hung to the scalp at the back of the head; white in colour, turning to a bluish tint. At the end of a week it was larger and red in colour. Some fluid escaped at a fortnight old. The tumour, as seen by Dr. Marshall, was as large as an orange, spherical in shape, attached by a short thick pedicle an inch long to the scalp at a point corresponding to the occipital protuberance, and hanging backwards on to the shoulders. The swelling could be lifted away from the skull, and no reduction in size was effected by pressure. It was soft, fluctuating, translucent, and resembled in appearance a spina bifida. A white broad line ran across the tumour from before backwards. There appeared to be no connexion between the posterior fontanelle (which was open) and the swelling. Pressure produced no ill effects upon the child. Its general health was good; there was no history of "fits" or squinting. The child was fed by the mother's milk, which was taken well.

Jan. 31st. — The tumour was tapped under chloroform, after securing the pedicle by an old pile clamp, with screws at either end. When the cyst was emptied of its contents (clear limpid serum) the growth was removed by the knife. The edges gaped too much for a continuous suture to be used, and three harelip pins with twisted sutures were passed through, with the double object of approximating the edges and preventing the clamp slipping off. In the centre of the cut surface a small channel was found, which admitted the end of a fine probe down to the point of compression by the clamp. The middle harelip pin was made to transfix the walls of this channel before passing out again on to the skin surface. The total quantity of fluid withdrawn was six ounces. On examination the tumour was found to be a meningocele, the membranes being collected into a rope-like body at the pedicle, with the small channel above referred to in the middle. There was no oozing of fluid or bleeding after the operation. The stump was washed over with boroglyceride.

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[1] Diseases of the Nervous System, 2nd series, New Sydenham Society.

[2] THE LANCET, June 16th, 1883.

Feb. 1st.—Clamp removed twenty-two hours and a half after operation.

3rd.—Two lateral pins removed, but the central one left in. The child was sleeping well and taking the breast. In the afternoon the anterior fontanelle was noticed to be raised, and the child was more restless. Some puffiness, too, was observed at the back of the neck.

4th.—Child more lively. Swelling in neck less, and fontanelle less tense. Ordered bromide and iodide of potassium, one grain of the former to an eighth of the latter, three times daily. 9 P.M.: Eyes staring; vacant expression.

5th.—Some cerebro-spinal fluid oozed away. The orifice of the channel was painted over with collodion. The wound surface, which was grey and sloughing, was dressed with oil of turpentine (1 in 6).

6th.—Slight oozing of fluid.

7th.—Last pin cut out.

8th.—Medicine omitted; child brighter and better in every way; anterior fontanelle flat.

14th.—Left the hospital. The mother lived in the country, and unfortunately missed her omnibus, and the child was therefore exposed much longer than was necessary on a cold day.

18th.—The child was brought into hospital, the mother having noticed twitchings of the face and limbs the night before, and the breast was refused. 5 P.M.: Had a convulsion; medicine returned to, every three hours. The child was placed in a dark room and fed with mother's milk by a spoon.

19th.—Occasional twitchings of the face and limbs, and the head drawn backwards; bowels relieved by enema.

20th.—Mother's milk disappeared; cow's milk and water used as food. Child much better; slept well all night; medicine given less often.

21st.—Jerking of trunk backwards; eyes open. 3 P.M.: Vomited milk in curds.

24th.—Vomiting ceased. 6 P.M.: Shrill scream; return of twitchings; swallowed with difficulty; face and neck flushed; eyes fixed; anterior fontanelle very tense; head noticed to be larger. Medicine as before.

27th.—Died to-day, having slowly and steadily become worse.

Necropsy.—The wound nearly healed. On removing the scalp an opening, half an inch in length by a quarter of an inch at its broadest point, was found three-quarters of an inch behind the posterior fontanelle, communicating with the interior of the skull, but closed by membranes which were welded together into a rope and attached to the cerebellum, a portion of which was torn away on removal of the brain. On cutting through the parietal bones the left lateral ventricle of the brain was opened, and a large quantity of fluid escaped. The surface of the brain was coated with lymph, and showed everywhere evidences of recent inflammation. Both lateral ventricles were very much distended, the left markedly so. The fluid in the left ventricle was clear, that on the right side was opaque and milky. The third and fourth ventricles were distended with fluid, and their boundaries softened and disorganised.

Remarks.—In this case there appeared to be legitimate grounds for adopting, with a fair prospect of success, the measures suggested by Mr. Holmes in his Surgical Diseases of Children, although these means had not, at the time his work was written, been put to the test by him. From the symptoms there was no evidence of existing internal hydrocephalus; but this condition is stated to be usually present to a greater or less degree in all cases. There was clear evidence of the absence of brain matter, and that the channel of communication with the inside of the skull, if one existed, was small. The child's general health was also exceptionally good. A tubercular history was made out on the father's side, yet not pronounced. In any future case with the same favourable prospect, the operation as done here might again be attempted with a different result.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Excision of Cerebral Tumour.

AN ordinary meeting of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President in the chair. Great interest was manifested in the proceedings, though there were but few who joined in the discussion.

Dr. HUGHES BENNETT read a paper on a case of Cerebral Tumour, the surgical treatment of which was managed by Mr. Rickman J. Godlee. The chief features of interest in this case were, that during life the existence of a tumour in the brain was diagnosed, its situation localised, and its size and shape approximated entirely by the signs and symptoms exhibited, without any manifestations of the growth on the external surface. This growth was removed by a surgical operation without any immediate injurious results on the intelligence or general condition of the patient, who lived relieved of his former symptoms for four weeks, and who at the expiration of that time died, not from any special failure of the nervous centres, but from the effects of a secondary surgical complication. The case, however, taught important physiological and clinical lessons, and suggested practical reflections which might prove useful to future medicine and surgery. In the communication the history and condition of the patient on examination were detailed. The diagnosis arrived at was stated with the reasons for the same. The surgical operation and subsequent treatment were described with comments thereon. The progress of the case, its termination, and the post-mortem reports were recorded. Finally a commentary was added in which all the important clinical, physiological, and pathological points of interest were discussed. (For further particulars of this case, *vide* THE LANCET, 1884, vol. ii., p. 1090, and p. 23 of the current volume.

Dr. HUGHLINGS JACKSON congratulated Dr. Hughes Bennett on the accuracy of his diagnosis. The operation Mr. Godlee performed showed that Dr. Bennett was right in saying that a cerebral tumour might, so far as the operation itself goes, be safely removed. The patient, most unfortunately, died, but he died of a secondary surgical complication. Dr. Hughlings Jackson also warmly congratulated Dr. Ferrier from whose valuable researches the tumour was localised. Speaking more generally of localisation of cerebral tumours with regard to trephining, Dr. Hughlings Jackson said that there was a kind of monoplegia, often passing into hemiplegia, which was almost certain evidence of cerebral tumour; a paralysis beginning very locally, for example, in the thumb and finger and spreading very slowly week by week. In such a case he should not advise trephining, since there would be great probability of a large tumour in the centrum ovale, not certainly, for he had seen such hemiplegia in a case of tumour of the dura mater pressing down on the cortex. The convulsive seizures of localising value were not cases of epilepsy proper, but epileptiform seizures, convulsions beginning one-sidedly and only locally in the hand, cheek, or foot. Whilst these seizures pointed with certainty to disease of the opposite cerebral hemisphere, they did not always occur from such gross disease as tumour. In some there was local softening. When, however, there was also double optic neuritis, such gross disease as tumour might be confidently predicted. Even yet there is not evidence of exact position. Dr. Hughlings Jackson had not yet seen a case of epileptiform seizure caused by disease outside Ferrier's motor region. But such cases were recorded by great authorities, so that, repeating in effect what Charcot and Pitres had urged, we required also some local persisting paralysis of the part convulsed—persisting, since temporary paralysis after a seizure was no further help towards localisation. So far, then, three things were required: local persisting paralysis, epileptiform convulsion, and double optic neuritis.

Dr. Hughlings Jackson mentioned the case of a man who had had convulsion and paralysis of one arm; a tumour, a cubic inch in bulk, was found involving the hindermost part of the uppermost frontal convolution. This was before Hitzig and Ferrier's researches; the exact position was not diagnosed. That tumour might probably have been got out with safety, yet there was considerable softening; moreover, there was a tumour in each lateral lobe of the cerebellum, although there had been no cerebellar symptoms. Another case in which a woman had very many convulsive attacks of one arm (later wider seizure was mentioned). In this case Dr. Hughlings Jackson correctly predicted tumour of the hindermost part of the uppermost frontal convolution and adjacent ascending frontal convolutions, but not with the confidence he should have done had Ferrier's researches then been made. The tumour was about an inch in diameter, and, had it been removed, very likely the woman's life would have been saved. She had not double optic neuritis, but, making an exception to a former statement, were he to observe a case of repeated convulsions nearly always limited to one arm, exactly alike at each recurrence, he should, even without double optic neuritis, consider them to be due in all probability to a tumour in the region mentioned. In another case he had diagnosed correctly tumour of the same region, but there were also other tumours in that half of the brain. Admitting difficulties—that the tumour might be very large; that there might be softening about it; that, besides the tumour localised, there might be others,—yet in a case where the tumour was evidently going to kill the patient, when there was intense pain, and when, as sometimes happened, the patient had twenty or thirty fits daily, the patient would consent to risk something, and a surgeon might justifiably operate. Dr. Hughlings Jackson remarked that, after operation in such cases as he had mentioned, there would, he thought, be the serious drawback of some permanent paralysis; but this was little in comparison with the misery of pain, torment, repeated fits, and great danger of death. In conclusion, he said that in a case of convulsion limited to one arm, or beginning in one leg, with some persisting local paralysis and double optic neuritis, he should diagnose tumour or other such gross disease of the upper part of the Rolandic region, and should seek surgical advice as to the propriety of trephining, not forgetting to state prominently the three difficulties mentioned.

Dr. Ferrier congratulated the authors on their success, which was gratifying both to Dr. H. Jackson and to himself. He had watched the case with the greatest interest, and was present at the operation, which was entirely successful; although the patient had been under the influence of the anæsthetic for two hours, yet at the end of that time he became conscious and was able to answer by gesture simple questions put to him by Dr. Ferrier. So that the patient bore the operation without any great shock to the nervous system, and he might say without danger to life, for there could be no doubt that death was due to an inflammatory complication, such as could only come under the chapter of accidents. The operation, if performed strictly antiseptically, need not be attended with any risk of encephalitis. Some authors had said that operations on the brain of monkeys were free from risk of encephalitis, but this was not the case. Monkeys were quite as difficult of surgical management as human beings. If antiseptics be employed inflammation need not result. In his earlier series of experiments on monkeys antiseptics had not been used, and then every animal suffered from encephalitis. During the experiments made with Professor Gerald Yeo, in which both frontal lobes or both occipital lobes, or other parts of the brain, were removed, this was done without any inflammation resulting because antiseptics were employed. He made reference to a case which had been under his care at King's College Hospital, because it illustrated important principles. The patient was a man who for two years had suffered from cerebral symptoms. He was admitted with coma and left-sided paralysis, and suffered from pain in the right frontal region when the coma lessened, as it did at times. The right eyeball was feebler than the left, and he had all the symptoms of cerebral tumour. At his instigation an exploratory operation was carried out by Sir Joseph Lister. The skull was trephined at the right frontal eminence. The frontal lobe of the brain was found to be distended by what at first was thought to be a cyst, but turned out to be the distended lateral ventricle. The knife, passed downwards, led to the escape of a gush of fluid; nothing further was done. The paralysis was relieved and the coma diminished by this procedure, but the patient died eight days later. At the autopsy a new growth was found to spring from the sphenoidal fissure, and had pressed upon the corpus striatum, and so caused the paralysis; the bulging of the eyeball was due to this new growth. This tumour would have been doubtfully removable, even supposing that it had been detected by the exploratory operation; but in order to verify a diagnosis exploratory measures should be adopted, for the disease if left alone would prove fatal. He felt confident that the future would yield more favourable results.

Dr. Macewen contributed an account of some cases which had been under his care, and which are being published separately in our columns.

Dr. H. Bennett referred to the important cases of Dr. Macewen, which had been attended with such brilliant success; yet he considered that his cases were scarcely analogous with the one brought forward; for a limited lesion of the brain had been diagnosed entirely by symptoms, whereas in Dr. Macewen's first case there were other indications to guide the surgeon. Then there was paralysis of a more extensive character than obtained in his (Dr. Bennett's) case. He then exhibited to the Society a brain taken from a patient who had been under the care of Mr. Davy. This patient had been trephined, and from the substance of the cortex as many as eight pieces of bone were removed; the bone had been forced there by an accident. The operation left behind it a large hole in the brain, which would take a pigeon's egg. There were no antiseptics used in this case, and yet the boy made an uninterrupted recovery. Death ensued some time later from acute double pleuro-pneumonia. The autopsy showed no trace of injury to the brain, except a hard dense cicatrix, the site of the former operation.

Mr. V. Horsley said that in this last case, which had been done without antiseptics, the conditions were hardly parallel with those which obtained in cases in which the brain had sustained no previous injury. In this case of depressed fracture, no doubt adhesions would be produced all round the injury, and effectually shut off the wound from the rest of the cavity of the arachnoid. Some practical surgical points in experiments and operations on the brain were alluded to. There was no doubt that morphia diminished the tendency to hæmorrhage, and the vigorous welling up of blood from numerous arterioles was seen to a less extent in his and Schäfer's experiments. The morphia was hypodermically injected, about two-thirds of a grain being the dose employed. As to the kind of dressing, he preferred the dry permanent dressing, for he had been astonished to see how rapidly the effused serum was absorbed. In only five out of forty experiments had he aspirated with a view to diminish the tension of the effused serum.

Mr. Godlee congratulated Dr. Macewen on his successful and brilliant results. He ventured to think that there was not so much hæmorrhage in opening into an abscess cavity as in cutting the unaltered brain. Moreover, he had employed the actual cautery partly no doubt to arrest hæmorrhage, but also with a view of destroying the deeper parts of the tumour, the boundaries of which were indefinite in the downward direction. In his opinion the inflammatory action was the cause of the hernia cerebri; inflammation would probably not occur without some putrefaction having been set up. In removing the deep part of the growth, which appeared to extend downwards in a conical fashion, he had used a Volkmann's sharp spoon, but some instrument rather larger and blunter like a salt spoon would probably have answered the purpose better. Large wounds in man had not in his experience been well treated when the wound was completely closed, and he considered that wounds in lower animals were not perfectly analogous to wounds in man. So that he agreed with Dr. Macewen that a drainage-tube should be used; otherwise there would be no opportunity for an extensive effusion of serum and blood to make its way out. As to the cause of the disaster in his case, he had no doubt that it was due to putrefaction, which was probably the result of imperfect purification of the scalp. He remembered that blisters had been employed in the occipital region, and had not healed; the serum from these sores might have contaminated the wound. At another time he should have the head shaved all over and thoroughly washed first with soap, and then with corrosive sublimate, and finally soaked in a strong solution of carbolic acid.

CLINICAL SOCIETY OF LONDON.

Obstruction of Arteries and Veins extending over many years.—Osteitis Deformans.—Hæmoptysis treated by Artificial Pneumothorax.—Removal of Calculus from Vermiform Appendix.

AN ordinary meeting of this Society was held on May 8th, Mr. Arthur E. Durham, F.R.C.S., Vice President, in the chair.

Dr. B. HADDEN read notes of a case of Obstruction of Arteries and Veins extending over many years. The patient was a healthy-looking man, aged fifty-one. His paternal grandparents had gout. The patient denied syphilis, but there were strong grounds for suspecting past infection. His present disease began suddenly in 1868, when he was seized with a sharp pain in the left foot, said to be gout. Phlebitis of the same leg, with swelling and tenderness of the limb, followed, the attacks lasting five months. In 1880 he came under the care of Dr. Mitchell Bruce for sudden obstruction of the right brachial artery. The radial artery was small, and the heart was irregular. Very soon the radial and ulnar veins became painful and thrombosed. In 1881 he had sudden loss of power in the left arm, but not in the leg. The face was thought to be drawn. There was some mental confusion, but no actual loss of consciousness at the time of the attack. Between 1881 and 1884 he is said to have had several attacks of arteritis and phlebitis. He was admitted into St. Thomas's Hospital under the care of Dr. Stone on Feb. 2nd, 1885. He had pain and tenderness in the right groin, with feeble pulsation of the femoral artery. No beat could be felt in the posterior tibial, but the dorsalis pedis was pulsating strongly. The right internal saphena vein was thickened and thrombosed. There was slight œdema of the foot, and some enlargement of the superficial veins. Pulsation was absent in the right brachial and feeble in the radial. There was a large collateral branch strongly pulsating just above and behind the external condyle of the humerus. There was no enlargement of the superficial veins. There was slight varicosity of the veins of the left leg, but otherwise the vessels were unaffected, as were also those of the left upper limb. On the front of both legs there were pigmented scars, very suggestive of syphilitic disease. The heart was irregular, but there was no bruit and no hypertrophy. The urine was free from albumen. The pain in the right groin persisted for six weeks, without any fresh obstruction occurring. He had two attacks of severe headache localised in the right frontal and parietal regions, but they both passed off without further mischief. The treatment consisted of mercury and iodide of potassium, with hot *soda* baths and complete rest. He is now free from pain, and is better than he has been for two years. In discussing the case, the author believed there was no evidence that the affection was gout. Possibly it was syphilitic. Two explanations may be offered with regard to the pathological nature of the disease. First, there may be embolism affecting the arteries, and phlebitis; secondly, there may be an inflammatory condition affecting the coats of both arteries and veins. The latter hypothesis seems the most probable, and it is supported by the fact that, although there was great tenderness in the right femoral vessels for six weeks, no fresh obstruction occurred.—Mr. A. P. GOULD referred to the cases (which Dr. Hadden and he had shown during the last session) of obliterative arteritis from which the present case differed very materially, for there was no evidence of affection of the veins. A case which occurred in Billroth's practice had been reported by Dr. von Winiwarter, who had written by far the best account of the disease. In Billroth's case the plantar and digital vessels were first affected, the posterior tibial being involved later, and its companion veins were affected. In the wide extent of the vessels affected, Dr. Hadden's case was peculiar; the disease was limited to one upper extremity in the cases shown last session. As a rule, the progress of the affection was steady and chronic, and attended with pain and some gangrene; the final result was generally a shrunken and colder limb. In Billroth's case the disease lasted a few years, and, although it was not very extensive, it recurred in the foot. In Dr. Hadden's case the obstruction appeared to be more sudden and acute than in the majority of cases of obliterative arteritis. He asked whether the pain was very severe; if it were limited to the vessels or spread over the whole limb; whether the obstruction spread from the smaller arteries up to the larger or in the opposite direction; also, whether the vessels were first felt to be harder and firmer than normal with lessened pulsation and only later on became completely pulseless; with regard to temperature, also, was it raised? as happened in his case; was there much swelling? there was very little of the hand and forearm in his case. Did the patient suffer very much from coldness?—Dr. ANGEL MONEY considered that the interesting case was worthy of inquiry from a neurological point of view. Lewaschew had experimentally shown that chronic irritation of nerves led to inflammatory changes in the walls of arteries. With this view in mind he asked whether there were any symptoms pointing to disease of the nerves.—Dr. HADDEN said that the pain was very severe but limited to the vessels; the disease spread from the large to the small vessels; the temperature was usually normal, but rose somewhat when the localised headaches appeared. There was no marked swelling of the limbs, but a great deal of coldness was complained of by the patient. The man was highly emotional, but he had not suspected a nervous causation for the disease.

Mr. J. R. LUNN read notes of a case of Osteitis Deformans. In St. Thomas's Hospital Reports for 1883, vol. xiii., he had given a full account of a case of osteitis deformans. Since 1876, when Sir James Paget drew attention to the disease, numerous other cases have been recorded. The chief symptoms noticed by the patient are pains of a rheumatic character in the affected limb, loss of height, and in male patients increased size of the head, rendering their hats too small. In a fatal case the morbid process was nearly universal, but the chief stress seems to have fallen upon the bones about the main axis of the body. The absorption and disappearance of the original bone seems to have been the primary event in the course of the disease, and must have taken place, not by a coarse process, but by a very delicate interstitial change. As to the nature of the morbid process which produced the anatomical alteration, the view advanced by Sir James Paget that it is a kind of chronic ostitis has been generally accepted. But, while fully admitting that chronic inflammation may have some share in the process, he did not think that it altogether accounts for the changes found. The conclusion he had come to is that osteitis deformans consists of:—1. A constitutional disease producing atrophy and absorption of a large part of the osseous system. 2. Consequent weakening of the bones, so that they yield when exposed to strain. 3. Compensatory strengthening of the growth of what may be looked upon as a variety of callus. 4. The occasional formation of definite tumours. 5. Fatal cachexia.—Mr. MACNAMARA said that in these cases there were pains of a rheumatic character. He had recently made some observations on the insertion of tendons into bone, and he had found that the tendons were prolonged into the bones; possibly the perforating fibres of Sharpey were such prolongations. The tendons were really portions of bone on this view, and he surmised that the disease might have commenced in the tendons and spread into the substance of the bone.—Dr. F. L. BENHAM spoke of the helplessness of the patients and of their weakness, which might be accounted for by the atrophy of the bones; for the new bone thrown out was obviously a secondary change. He thought there was merely a difference of degree between this disease and osteomalacia.—Dr. THOROWGOOD remarked on the failure of anti-rheumatic remedies to relieve the symptoms of this disease. The administration of small doses of Fowler's solution was followed by marked improvement in his hands. It would be interesting to know the very earliest symptoms of the disease. He had seen cases in which pain in the joint with crackling sensation in passive movement were the main features. Did these cases go on to osteitis deformans?—Mr. WARRINGTON HAWARD referred to the possible occurrence of the disease without any rheumatic pains. In cases that he had seen pain was not a marked symptom; not unfrequently the urine was alkaline and there were no other signs of rheumatism.—Mr. STEPHEN PAGET could not concur in the remarks of Mr. Macnamara, for the chief deformity of the bones occurred in parts away from the insertion of tendons, the skull was enormously thickened in the region of the eminences, and there was bowing and thickening of the anterior surface of the tibia in cases which he had seen. The curves of the arms, clavicles, and spine were influenced by the posture which the patient assumed. Much difficulty of respiration was brought about by ankylosis of the ribs.

Patients die partly from cardiac weakness and partly from the difficulty of breathing. Full mental activity seemed to be retained, and there was no more loss of flesh or vigour than was natural to people of their age.—Mr. J. R. LUNN, in reply, said all his cases had had rheumatic pains. He had submitted the occipital bone and the tumour of the iliac bone to Dr. Sharkey, for histological examination. There was much irregularity in the anatominal structure of the bone; absorption or rarefying osteitis appeared to be the dominant process; the bone corpuscles were not arranged in parallel lines; there was also clear evidence of a formative osteitis. The tumour was cartilaginous throughout, and not sarcomatous. No definite history of the early symptoms of the disease was to be ascertained in the majority of cases. He believed that there was no specific cachexia in the affection.

Dr. CAYLEY read notes of a case of Hæmoptysis treated by the Induction of Pneumothorax so as to Collapse the Lung. The patient, aged twenty-one, a porter, was admitted into the Middlesex Hospital on Feb. 9th. For some time past he had suffered from a slight cough, but otherwise his health was very good. On Feb. 7th he was at work as usual. In the evening he had a sudden attack of hæmoptysis, which recurred the next morning, and again the following night; and immediately after his admission he brought up 4 oz. of florid blood. He considered that he had in all brought up about a pint. Patient was rather pale, but well nourished and of good muscular development. The left side of the chest was flattened in front, and the expansion was much diminished. There was dulness on percussion over the scapular region, and here there was feeble bronchial breathing. The breath sounds all over this lung were very faint, and accompanied by moist râles. These signs were attributed to the lung being clogged with blood. On the right side the physical signs were normal. He was quite free from any feelings of malaise, and his appetite and digestion were good. He had in all brought up upwards of a gallon of florid liquid blood, besides a large quantity of blood-stained sputum. The physical signs over the left front were much as on admission. On the right side rather fine moist râles were now audible in front and in the axillary region. The temperature was usually normal or subnormal in the morning, and varied from 101° to 101·8° at night. The breathing was but little accelerated and tranquil. As it was now evident that much repetition of the hæmorrhage, in all probability due to a pulmonary aneurysm or to the ulceration of a large vessel, must prove fatal, it was determined to induce pneumothorax, with the expectation that the great diminution of the circulation through the collapsed lung, together with the pressure exercised by the air, would arrest the hæmorrhage; and supposing there was active development of tubercle in progress in the lung, this would probably for a time be checked. It was considered that the extreme anæmia of the patient would diminish the embarrassment to the breathing likely to be caused by collapsing one lung. Accordingly, at 6 P.M. on March 10th, Mr. Hulke made an incision in the sixth intercostal space, an inch behind the anterior fold of the axilla, and intoduced into the pleural cavity a double tube, made by uniting together by a shield two pieces of elastic catheter about three inches long. The opening was protected by a small cage, lined with carbolic gauze, and the whole covered by a carbolised gauze bandage. The air passed freely in and out at the time of the operation, and the apex of the heart moved to the mid-sternal region; the respiration became much accelerated. On March 12th it was observed that the breath sounds over the left front had become more audible, and the percussion resonance less tympanitic than after the operation, and the tube was found to be completely blocked; it was accordingly removed, and a silver tube resembling a flattened tracheotomy tube was introduced in its place. The air now passed in and out freely, the resonance became tympanitic, and the "bell sound" could be elicited. The apex of the heart could be felt beyond the right border of the sternum. He afterwards complained of severe pain in the side. The temperature rose to 104·6°, and much serous fluid began to flow through the tube. The following day the tube was removed. On March 14th, though extremely prostrate, he felt better. He continued to spit frothy glairy mucus with pellets of altered blood, but there was no return of the hæmorrhage. On March 15th he was in much the same state. At 2 P.M. he died quite suddenly, apparently from syncope. After death both lungs were found studded with recent grey miliary granules. The right lung was free from any old tubercular disease. In the apex of the lung was a very small old vomica with smooth walls, and some puckering round it. The lower lobe and the lower part of the upper lobe were collapsed, and the pleural surfaces smeared with recent lymph. The pleural sac contained about two drachms of non-purulent fluid. In the lower part of the upper lobe close to the interlobular septum, which was bulged downwards by it, was a cavity the size of a walnut, filled, except at its centre, by a light-coloured laminated clot, so as to closely resemble an aneurysm. In the centre of this clot was a small round cavity containing a little loose black coagulum, and this cavity communicated with a considerable branch of the pulmonary artery. A large bronchial tube opened into the periphery of the pulmonary cavity, but was shut off by the laminated clot from the central space. At the upper part this clot was softer and more recent than elsewhere, and had no doubt recently allowed a communication to take place. The cavity in the lung containing the clot was smooth-walled, but showed no signs of any aneurysmal sac. There was no old tubercular disease around it. As the case turned out to be one of acute miliary tuberculosis, it is evident that no treatment could have availed to prevent a fatal termination. The patient did not live long enough to warrant positive conclusions as to the effect of the operation in arresting the hæmorrhage. He had two slight attacks in the following night, but there was no subsequent recurrence. The necropsy showed that the communication between the false aneurysm and the bronchus was closed, and possibly if the patient had lived complete solidification of the aneurysm would have been effected. Considering how largely the pulmonary circulation is influenced by the respiratory process, and the small amount of blood which flows through a collapsed lung, such a mode of procedure affords a means of arresting an otherwise uncontrollable pulmonary hæmorrhage. Any extensive consolidation of the lung would no doubt, by preventing collapse, be a contra-indication, and would thus restrict the applicability of the operation to a few cases. The probability of exciting pleurisy was, of course, another objection. In this case, notwithstanding careful antiseptic precautions, pleurisy was set up, but it was of a simple non-suppurative form, and but for the tuberculosis would not have added much to the patient's danger.—Dr. THEODORE WILLIAMS thought the case was one of great interest, and he congratulated Dr. Cayley on his courage. Then, as to the utility of the mode of treatment, he considered there were grounds for discussion. In many cases the patients were reduced to the last extremity by hæmoptysis, and yet finally recovered. Derivative treatment was sometimes beneficial. In a case which he had under his care where the hæmoptysis probably proceeded from a vomica, into this vomica he had injected a solution of tannic acid, with the result that the hæmoptysis almost immediately ceased. The sputa later on gave the reactions of tannic acid. What were the advantages to be gained by inducing a pneumothorax which the patient would necessarily carry with him ever afterwards?—Dr. DUFFIN said that the question to be decided was whether the immediate effect was beneficial; the lung was practically reduced to a fœtal condition through which but little blood flowed. He did not think that we need be afraid of the admission of air into the pleura. Physiologically we should expect valuable results to follow the operation. The difficulty was to know when we should be justified in resorting to this heroic remedy.—Mr. R. W. PARKER thought the treatment was rational, but there were ways of causing pneumothorax without running risk from septic agencies. He recommended the injection of filtered and carbolised air into the pleura such as he had advised in the treatment of certain kinds of empyema. A hypodermic syringe with an elastic ball and some carbolised cotton-wool were the only articles required for the operation.—Dr. S. COUPLAND did not suppose that Dr. Cayley would have performed the operation if he had known the precise pathological condition which existed in this case, which was of a remarkably singular character, for there were very few physical signs of pulmonary tuberculosis. The case proved that a large amount of disease of the vessels could occur without any physical signs of disease.—Dr. CHAPMAN thought the case would have been still more interesting if the details of treatment were given. Was the side of the chest compressed and strapped by plaster?—Mr. CHARTERS SYMONDS spoke of the induction of artificial pneumothorax as having been suggested by Dr. Mahomed in a case on which they had held a consultation. The aim of the operation was to be the arrest of phthisis.—Dr. EWART considered that an important departure in the treatment of pulmonary cavities might date from Dr. Cayley's recommendation. The arrest of the circulation in the lung might throw the other lung into such a condition as to lead to hæmoptysis from it. He remembered that some time ago Dr. Douglas Powell had induced artificial pneumothorax for the treatment of a large cavity. The upper lobe of the lung had been almost entirely destroyed, and the cavity in it had been practically obliterated, as the autopsy showed. The lower lobe of the lung was practically carnified; there was an empyema, and aseptic air was introduced as a means of treating the empyema, and at the same time with a view of causing collapse of the pulmonary cavity.—Dr. HADDEN said that the pleura might have been universally adherent, and artificial pneumothorax would be useless if the aneurysm were at the apex of the lung, as this portion would not collapse.—Dr. CAYLEY, in reply, said that every means for arresting the hæmorrhage were tried. There were no physical signs of old pulmonary disease. He thought that the pressure of air and stoppage of the circulation would have an influence on an aneurysm, even though this was in the apex of the lung. The condition of pneumothorax was not necessarily a serious matter. A patient, the subject of a wasting disease, required less area for breathing purposes than a man in sound health.

Mr. CHARTERS SYMONDS read a paper on a case in which, at the suggestion of the late Dr. Mahomed, he had removed a Calculus from the Vermiform Appendix for the relief of Recurrent Typhlitis. The following are the chief particulars of the case:—Charles S——, aged twenty-three, a basket maker, was admitted into Philip ward, Guy's Hospital, under the care of Dr. Mahomed, July 16th, 1883. The patient had typhoid fever a year ago. The report of Mr. Vernon, the clinical clerk, says that "six months ago (January, 1883) he was seized during the night with pain in the right iliac region; this increased in severity and he became ill generally, and at the end of a week was unconscious, remaining in this state four days. The illness lasted seven weeks. During the first week he vomited everything, and his bowels were not opened for ten days. During the whole time there was great tenderness in the right iliac fossa. On getting about, he noticed a hard lump in the right groin about the size of a walnut; sometimes this swelling was painless, at other times it was very tender. Since this illness he has had repeated attacks of pain in the right iliac fossa, which come on suddenly and last one or two days. The pain is relieved by poultices. At first these attacks recurred about once a month, but during the last five weeks he has had six attacks, and they have been increasing in severity." On admission there was to be felt in the right groin on deep palpation a small hard lump about three-quarters of an inch by two inches running parallel with Poupart's ligament. There was slight tenderness on pressure. The man was placed on a fluid diet, and was soon relieved of all his pain. Dr. Mahomed considered fully the question of operation, and proposed that the cæcal region should be approached by an incision in the right iliac region, as he was strongly of opinion that there existed an abscess cavity containing probably a calculus or concretion, and that the periodical occlusion of a communication with the cæcum determined the recurrence of pain. One of the attacks had been observed in the hospital, and was accompanied by an increase of the swelling, which also remained dull on percussion. Mr. Symonds thought a peritoneal adhesion constricting the last portion of the ileum might explain the periodic attacks, as he had seen a somewhat similar condition before. As the complaint continually recurred, it was decided to explore the right iliac fossa. Dr. Mahomed planned the operation, and it was on his recommendation that the incision adopted was selected. The lump was oval in shape, could be distinctly felt, but could not be taken hold of. It was well defined and only slightly tender. The most probable explanation seemed that this lump was a concretion; but whether inside the appendix, or resting in a cavity bounded by peritoneal adhesions and bowel, was doubtful. It was therefore decided to cut down upon the lump to remove a calculus present or drain a cavity should pus be found. Chloroform was administered, and under the carbolic spray an incision was made commencing two inches above and one inch internal to the anterior superior iliac spine, and curving downwards and forwards for about four inches, being much the same as that used in ligature of the external iliac, and so arranged that its centre corresponded with the position of the lump. The various structures were divided, but the transverse fascia was not distinctly recognised, owing possibly to the incision being rather near the iliac spine. The structures in front were now raised out of the iliac fossa, when the swelling could be plainly felt from behind, and as yet the peritoneal cavity had not been opened. A hand pressed duly from the front steadied the swelling, and brought it more into the wound. A vertical incision was now made over the hard lump, and a small calculus exposed. Before removing it a fine silk suture was passed through the tissues just above, so that the orifice might not be lost. The opening was then enlarged, and the calculus exhibited removed. The soft and purple mucous membrane of the appendix was seen, and its tortuous course from the aperture could be traced upwards towards the cæcum, so that there seemed no doubt of the canal having been opened. Exploration of the cavity with a probe failed to detect a channel leading towards the cæcum. No pus or other fluid was found round the calculus, nor was there any fæcal or unpleasant odour. The opening into the appendix was closed by Lembert's method, and the wound by deep silk sutures. The peritoneum was not opened so far as could be determined, and this was attributed to the adhesions that had probably taken place at the time of the first attack, and to the method adopted in reaching the appendix. The usual gauze dressings were used. The calculus was oval in shape, smooth on the surface, and measured three-quarters of an inch long, and rather more than half an inch wide. On section it showed a laminated calcareous capsule enclosing hardened fæcal matter.—With the exception of some local disturbance about the wound the patient did well, and was discharged at his own request six weeks after the operation. There remained some induration to be felt on deep pressure, but the wound had apparently healed. During the whole of his stay the temperature never rose above 99·4°. Fearing some further trouble might arise while any lump remained in the iliac fossa, he was directed to return at the first sign of a recurrence of his former symptoms. The man resumed work in a fortnight, and suffered no inconvenience till a month later, when he felt pain in the right iliac fossa, which gradually spread over his abdomen, and became so acute that he was obliged to take to his bed. Two days afterwards he observed a yellowish fluid escaping from the wound. He was readmitted two days later. There was a sinus three inches long discharging a thin yellowish fluid, and the hard swelling noticed when he was discharged. He had improved, and there was to be noted induration beneath the scar, and from here the appendix could be traced upwards. The rounded swelling that had been observed, and which varied in size, had now entirely disappeared. Three weeks after admission he was discharged, the sinus having closed, and the man being in good health. When last heard of (April, 1885), though an inmate in the Barming Heath Lunatic Asylum, he was free from his old disease, and had never had any trouble since Nov. 1883. Mr. Symonds remarked that this is the first case in which a concretion or calculus has been removed from the appendix vermiformis without at the same time the opening of an abscess, and the credit of whatever value rests in the procedure must be given to his lamented colleague, Dr. Mahomed, at whose suggestion the operation was undertaken, and who further advised the inguinal incision in opposition to that in the linea semilunaris proposed by himself. That the operation in this case was justified few will deny when it is remembered how frequently a concretion is found to be the cause of fatal typhlitis. This fæcal concretion was present in eleven out of seventeen fatal cases, in all of which the disease originated in the appendix, either as a sloughing ulcer with a concretion or a sloughing ulcer without a concretion. He mentioned this to exclude tubercular ulcers. This case was so isolated that it was not expedient to attempt to formulate conditions under which we should undertake similar operations. In none of the eleven cases mentioned above was the concretion calcareous. He directed the dissection to the posterior surface of the cæcum and appendix, not because he imagined that under normal circumstances he might avoid the peritoneum, but because here, if anywhere, he would probably meet with adhesions, and so possibly enter a case containing the appendix and concretion shut off from the general peritoneal cavity. After the study of twenty-three fatal cases, and with a knowledge of how frequently large iliac swellings due to typhlitis disappear, he suggested that some cases at least might be saved by early incision. Such cases are recorded, and success has followed the treatment.

The following living specimens were shown:—Mr. John Hopkins: Two cases of Myxœdema. Mr. Willett: A case of Congenital Enchondromata.

LEEDS AND WEST-RIDING MEDICO-CHIRURGICAL SOCIETY.

AT the ordinary meeting held on April 10th, Dr. S. C. Smith, Vice-president, in the chair,

Dr. JACOB showed Microscopical and other Preparations from the Intestine and Liver of a case of Tuberculosis occurring in a child aged two years, which had caused death with symptoms of acute intestinal obstruction. The glands were enlarged into great masses completely surrounding and obstructing both the cæcum and one part of the ileum for about two inches. The liver showed microscopically great fatty infiltration and increase of connective tissue. The viscera from this case, freshly removed, were shown to the Society by Mr. Hartley at a previous meeting.

Dr. JACOB also read a paper on "Second Attacks of Scarlet Fever."

Mr. J. J. PICKLES related the case of one mother in three successive pregnancies giving birth to children the subject of Harelip, there being no hereditary tendency or other apparent cause of the deformity.

Professor JESSOP showed a young man with perfect movement of the elbow, on whom he had operated for Ununited Fracture of the Olecranon, by wiring together the fragments. The operation had been done some months previously, up to which time the patient had a useless and weak limb.

Professor JESSOP also showed a man on whom he had operated for Fæcal Fistula, the opening being high up in the jejunum, as shown by the motions being liquid and full of bile. The patient had been stabbed in the abdomen several years before, and had ever since had the fistula, for which he had been several times unsuccessfully operated on. The operation consisted in opening the abdomen, detaching the bowel from the abdominal wall, refreshing the edges of the opening in the gut, which was the size of a shilling and opposite the mesenteric attachment; carefully suturing the edges of the intestine by eleven carbolised silk sutures passed from within and one from without, through all the coats of the bowel; returning the closed viscus and stitching up the abdominal opening as in ovariotomy. Flatus passed after a few hours, and after the second day the temperature continued normal, the man recovering without a bad symptom.—Mr. WHEELHOUSE said that he looked on the case with great satisfaction, since on this very man he had several years ago done every operation he could think of without any benefit. He had not, however, seen the case until some time after the accident, when the fistula was fully established.

Dr. OLIVER read a paper, with demonstrations, entitled "A Contribution to the Clinical Study of the Liver, viewed through the Urine," which, together with a second paper read on May 1st, is in course of publication in our columns.

At the ordinary meeting held on May 1st, Dr. Bell, President, in the chair,

Mr. E. ATKINSON showed a patient, aged twenty-one, who had suffered Compound Dislocation of the Astragalus forwards and outwards in November, 1884. As there was a wound of four inches, the diagnosis was easily made and the astragalus was felt to be firmly fixed to the os calcis. Reduction was effected under ether without division of the tendo Achillis. When the patient was shown to the Society the ankle was somewhat swollen and stiff, but the wound was healed and the man could walk with only a slight limp.

Mr. NEVITT read a paper on Coca and its Alkaloid. After giving an account of the botanical relations of the plant and its use by the native Indians as a stimulant and narcotic, he referred to its use as a local anæsthetic and gave a list of the surgical operations in which it had been used, including cases of hæmorrhoids, fistula, opening mammary abscess, applying arsenical paste to epithelioma, circumcision, irritable conditions of the bladder, lithotrity, vaginismus, toothache, pruritus ani, lichen, eczema, and in numerous operations on the throat and nose. He had used it himself in four cases. 1. The removal of a vascular growth from the female urethra; a 20 per cent. solution being applied on cotton-wool. 2. A case of *vaginismus* in a newly married woman; the same solution was applied on a pledget of wool, and in five minutes the patient could bear the introduction of a Ferguson's speculum and the application of carbolic acid to two fissures. A vaginal dilator was used frequently, and the patient was enabled in a very short time to return to her husband. 3. He had used it in applying carbolic acid to a fissure of the rectum. 4. In applying nitric acid to a chancroid sore.

Reviews and Notices of Books.

Lectures on Diseases of the Nervous System. By WEIR MITCHELL, M.D. Second Edition. Philadelphia: Lea Brothers and Co. 1885.—We reviewed these Lectures on Diseases of the Nervous System when they first appeared, about four years ago. The second edition has been somewhat enlarged and revised. The difficulties of diagnosis in hysterical disease of joints receive special consideration in the new edition. The chapter on this affection opens with a description of a typical case of hysterical disease of the knee-joint, in which there could be no difficulty in assigning the true origin of the complaint, for the present and past associations of the affection were only too manifest. Difficulty in diagnosis arises, as Dr. Weir Mitchell truly states, when there has been a real injury or true joint disease, and with it hysteria, or this later condition primarily, and inflammatory joint lesions supervening. Then problems of "exasperating perplexity" beset the physician. A case is narrated in which the affected knee was the seat of notable alterations of temperature, as ascertained by a surface thermometer. The sound knee was also investigated, and showed no abnormality. The temperature of the affected joint began to rise about 9 P.M., and was attended with redness, swelling, and tension. The same set of symptoms could be brought about at any time by handling the knee. Ultimately, under the advice of Professor Billroth, the joint was laid open and explored, with a view to obtain ankylosis. But inflammatory exudation in the connective tissues was not discovered, and the ends of the bones and cartilage were found to be normal. "For those who believe that hysteria never gives rise to organic change, this case will certainly be full of instruction." This lecture is by no means an exhaustive one; but, like most of the lectures, the interest lies in the keen insight into the nature of the subject and in the suggestiveness which the author manages to throw into his somewhat sketchy accounts. Other new chapters have been introduced on the relations of hysteria to organic disease of the spine and on the hysterical disorders of the rectum. The lectures must command the thoughtful attention and careful study of all who desire to read what is best in medical science.

The Microtomist's Vade Mecum. By ARTHUR BOLLES LEE. London: J. and A. Churchill. 1885.—This work, as the preface states, is to put into the hands of the instructed anatomist a concise but complete account of all the methods of preparation that have been recommended as useful for the purposes of microscopic anatomy, and so to furnish him with a ready source of information on points of detail as to which his memory or his knowledge may be at fault. It is a work that has been much needed. George E. Davis's treatise on Practical Microscopy, one of the latest books on this subject, deals chiefly with the instrumental part of microscopical work, and, though otherwise good, is deficient in that which relates to hardening and staining tissues for section. Moreover, within the last few years an extraordinary number and variety of processes have been published, some of which are available for almost any tissue, while others are adapted for special organs and objects. The work before us is divided into 660 sections, and almost every section is devoted to a description of some staining agent or process, some material for injection, or some mode of mounting. It is in fact a complete repertory of modern methods. It is well remarked by the author that, notwithstanding the great variety of processes recommended, which are, indeed, almost as numerous as the tissues to be examined, a certain system underlies that variety; the system consisting in the first place of fixing the structures to be examined, then staining them with a nuclear stain, dehydrating with alcohol, and, mounting series of the sections in balsam. In accordance with this principle, the majority of preparations are made by fixing, either with sublimate or a picric acid combination, washing out with alcohol, staining with alcoholic borax-carmine, embedding in chloroform-paraffin, cutting with a sliding *microtome*, and mounting the sections in series in Canada balsam. No microscopist should be without this handbook of the methods of microscopic anatomy, which will supply him with useful information on every subject he may require to know when at his table, and will give him suggestions that he may readily turn to account.

Manual of the Antiseptic Treatment of Wounds, for Students and Practitioners. By W. Watson Cheyne, M.B., F.R.C.S., Assistant-Surgeon to King's College Hospital, &c. With Illustrations. London: Smith, Elder, and Co. 1885.—This book supplies a known want. It is notorious that many who speak and write of the antiseptic treatment of wounds are but imperfectly acquainted with the scientific basis upon which it rests, or the many details in its management upon which its full success depends. Mr. Watson Cheyne's larger work is too bulky for the majority of readers and practitioners. He has done well, therefore, to place the essential considerations and facts within the compass of 150 octavo pages. Having gone carefully through the book, we can confidently recommend it to all who seek to become acquainted with Sir Joseph Lister's method.

Die Methoden der Bakterien-Forschung. Von Dr. Ferdinand Hueppe. Wiesbaden: C. W. Kreidel. 1885.—Modern pathological research has opened up an entirely new field of study, for to be an all-round pathologist nowadays one must be a mycologist also. It is, then, highly necessary that some guidance should be given to those who desire to pursue a study that requires minute observation and most careful manipulation. For this purpose Dr. Hueppe has written a book which covers the whole ground. It is a laboratory handbook, and deals in the first place with the microscopical detection of forms of bacteria with and without the aid of special staining reagents, within diseased tissues and isolated from them. Thence he passes to the next step in all such research—viz., the separation of the bacteria and their cultivation in various media, so important for the detection of specific differences. Then come the inoculation test and its various methods of application. After sections devoted to such subjects as the action of temperature and disinfectants, and the investigation of soil, water, and air, Dr. Hueppe concludes by advocating the formation of bacteriological laboratories in connexion with hygienic institutions. The author has every right to be heard on the subject, and we may be sure that what he says is founded on an extended personal experience.

Darkness and Dawn: the Peaceful Birth of a New Age. London: Kegan Paul, Trench, and Co. 1884.—This is a smartly written little book, containing some fine irony, and wholesome, though sad and sober, truth, dressed in a somewhat Ruskinian garb. Worshippers of the great god Commerce will wince if they read it, and the glorifiers of Trade, as the prime civiliser of the world, will not relish the remorseless fashion in which their idol is demolished. But a revolution, bloodless yet complete, is represented as changing all this. The transformation is inaugurated by a self-denying nobleman, who relinquishes, for the benefit of the State, his possessions, and, his example becoming contagious, the nation of shopkeepers is gradually converted into a real Christian commonwealth, each for all and all for each. Zymotic diseases die out, relentless competition having ceased, the motive for food adulteration no longer exists, whilst all that is noblest and best in human character has full sway. So ends the tale. Gloom, lurid and intense at the beginning, merges into the brightness of a golden age. "So mote it be!"

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Tuesday, May 12th.

Sir H. Acland, President, in the Chair.

The President, in opening the proceedings of the Council, said:—The session brings the Council together once more with the same constitution and the same functions to discharge that were assigned to it by Parliament in 1858. It has often been remarked, that so long as this is the case we cannot intend nor even wish to abandon the post of duty so assigned and undertaken. On this head, therefore, no more now need be said. At a later period I shall have to make a single observation on an important question arising from the situation in which we are placed. It was lately my happiness to see the Marquis of Ripon, since he returned from his distinguished administration in India. I reminded his lordship that in the fifteen years that had elapsed since he had endeavoured in vain to consolidate the medical examination arrangements of this country, no action taken in that direction by Parliament had been successful, notwithstanding the sincere labours of successive Governments—labours appreciated and often acknowledged by you. But I was able to add with satisfaction that, nevertheless, education had continuously advanced; that many anomalies had comparatively ceased; and that I sincerely believed that there was, upon the whole, an honest rivalry among teachers and between institutions to carry out, by voluntary exertion, the principles by which he had sought to secure the public good. It had been my wish this year to have taken a brief survey of the education and examination changes which, as I understand them, have taken place in these last fifteen years. But since they are still in transition, I shall confine myself to-day to a short account of the present position of the Council's work, reserving a more complete statement for another occasion. My reasons for adopting this course are these. At the last meeting of the Council instructions were given in three directions, each of which had separately much significance, and are, when taken together, calculated to produce a great effect on the course of medical education. The three were: 1. The revision by the Branch Councils of England, Scotland, and Ireland, severally and separately, of the recommendations hitherto issued by the General Council. 2. No person should be granted a degree, diploma, or licence to practise, registrable under the Medical Act, unless he has proved his competency in medicine, surgery, and midwifery, by passing examinations in those subjects at one or more of the licensing bodies. 3. The inspection of the final medical examinations in all the universities of the United Kingdom. Before we proceed to-day to consider in detail the result of the Council's instructions, it may be well generally to note the effect of these instructions taken collectively and in their complementary relation to a Report which as yet has hardly been fully considered—viz., that on the examinations by the corporations in England, Scotland, and Ireland, by Mr. Teale, Professor Gairdner, and Mr. Stokes. The reports on the recommendations having been circulated among the members of the Council, they will have already observed that the several suggestions of each Branch Council have been printed in parallel columns along with the original recommendations of the Council. The General Council can now compare at a glance these Branch Council suggestions with those of the

General Council, and can readily draw in each case their conclusions. The General Council requested each Branch Council to confer as far as it might deem desirable with the several licensing bodies of its division. They all did so, and the several replies of these authorities are appended to each Branch Report. The English Branch decided that it was desirable to give to some of the teachers in the English schools an opportunity of recording their opinions on the several points raised in the recommendations. There are no fewer than twelve separate medical schools in London only, with about 350 accredited teachers; and in the provinces there are as many as nine schools, with about 250 teachers. The English Branch Council decided not to address officially each school as a whole, but only to write to a few individual teachers. Accordingly a small selection was made, comprising representatives of every subject taught, whether in the larger or in the smaller schools. Seeing the great change that has taken place in the last twenty-five years, not only in the ideas but in the apparatus of teaching, some of the younger as well as the older teachers were applied to. It is not without interest to compare some of these replies with those received by the Committee on Professional Education presided over by Mr. Syme in 1869, together with the Report of the London Teachers' Association, presented by their chairman, Mr. John Simon. In the last twenty years, opinions concerning the administration and teaching in the London and provincial schools have greatly changed. The Council, in thus revising and reissuing its recommendations, has, for two reasons, a delicate task to perform. The Council's recommendations have often been assailed from two opposite quarters. First, by those who believe that great institutions—such, for instance, as the Universities of London, Edinburgh, and Dublin—that have worked honourably, and faithfully, and independently in the past, and have with justice acquired a great name, should be seldom interfered with by this Council, and then only in cases of importance, and not in matters of detail. It has often been said, and with truth, that these recommendations are sometimes framed by narrow majorities, and that they touch on points which had better be left to the experience, the progressive experience, of individual institutions. It is therefore alleged that the recommendations should properly be considered as suggestions, and not as orders; that they should, in fact, be regarded in the light of "moral suasion," as it was called by Mr. Syme, with just a touch of the "moral influence," as it is described, of an ironclad in a neutral harbour. But on the other hand, it is said that the recommendations have no value because they cannot be enforced,—and that for this reason the Council is in a false, and it is even said in a humiliating, position. I venture to make a brief reply to both these criticisms—a reply based on observation, and as simple as it is true. The Legislature did not intend this Council to be mandatory in its action. It did intend the Council to be consultatory and hortatory. It was constituted of persons who were entitled to be consulted and capable of advising. It did not intend to relieve the great institutions for the higher education from the responsibility of their trust, or deprive them of freedom to advance on their own lines. It did direct the Council to ascertain whether these did so act, and to report them if they did not. It did call on the representatives of all these institutions to combine in this Council for national consultative and directing purposes, laying aside here, for the common end, their local aims and prejudices, if they had any, which were out of harmony with the general interest. It is easy enough to ascertain whether, and how far, these several intentions have been fulfilled. At no time in history has it been more difficult to fix a standard of education, general, scientific, or practical. Since the Council has existed, the extent of biological knowledge has increased in an unprecedented way; the foundations of therapeutics, the very conceptions concerning prevention of disease, have been enlarged by observation and experiment, and the course of study and examination has been necessarily widened and become more complicated. It became therefore judicious, if not necessary, to seek separately the matured opinions of the independent authorities in England, Scotland, and Ireland, for the purpose of learning their most recent educational views. It has often been stated that there are real differences in the three divisions of the kingdom, which should be taken into account in framing a general scheme. If so, we might hope thus to learn their nature, and how to allow for them, and we may expect now more completely to harmonise the matter as well as the manner of study and examination. That these observations are not connected with an imaginary difficulty, and that it is dangerous for the Council to issue recommendations which cannot be made orders, will appear when letters from the Universities of Oxford, Cambridge, and Dublin are laid before you and discussed. The next instruction of the Council to which attention may be drawn is "That, in the opinion of this Council, no person should be granted a degree, diploma, or licence to practise, registrable under the Medical Act, unless he has proved his competency in medicine, surgery, and midwifery, by passing examinations in those subjects at one or more of the licensing bodies." An observation was lately made on an official occasion to the effect that the issuing of this recommendation showed the need for the reconstruction of the Medical Council, because the Council could not enforce it. The premises and the conclusion both appear to me equally at fault. It is not certain that practically the Council cannot enforce the recommendations; but if a legal authority desire to do its assigned legal duty, and if it is not enabled by the law to do it, then the law should give the powers requisite for carrying out its intentions. In this case a clause of a few lines would give it. But the Council, if it think fit, is able to represent to the Privy Council that having long since agreed with each Government that has affirmed the principle of its recommendation, and having waited for many years for accomplished legislation on this and on other points, it has advised the licensing bodies to carry out the principle of all the amending Bills in this direction. By combination they assuredly can do so. Indeed, to a partial extent, this has been done by the corporations of Scotland and of England, and there is hope that it will be done also in Ireland. In order to ascertain what is the actual condition at present in regard to the registration of single qualifications, the entries made in the Register for a period of six months have been examined by the registrar. Between the 1st of October, 1884, and the 1st of April, 1885, there were registered 175 persons with a single qualification, and of these 175 only 11 have subsequently registered a second. This constitutes about $\frac{5\cdot7}{100}$ of the whole number of registrations, $\frac{4\cdot2}{100}$ of those in England, $\frac{1\cdot3}{100}$ of those in Scotland, $\frac{3\cdot3}{100}$ of those in Ireland. Of those in England, 62 had a surgical qualification only, and 113 only a medical one. Some of the statistics concerning students also are noteworthy. One of the most remarkable is recorded in a table by Mr. Miller in the Student's Register of last year—viz., that the number has increased between 1870 and 1884 from 1160 to 1957. The subject of the statistics of the profession will be brought before you by Mr. Marshall. The inspectors whom you directed to be appointed to visit the final examinations of the universities have begun their labours. A calendar has been prepared of all the examinations to be held during the present year, and whatever further information or assistance the visitors may require in each branch of the kingdom will be from time to time furnished from your office. Each division of the kingdom is to be visited by visitors from the other two divisions. The Council is already indebted to the able persons who have undertaken this task, it must be said, wholly or mainly on public grounds. It would not become me to anticipate the result of their inspections. Yet, it should be now borne in mind that when these reports are examined in conjunction with the report of 1881-2 on the corporations, and when both are compared with your conclusions which will appear in your revised recommendations, and with your resolutions as to excluding single qualifications from the Register, there will be a complete body of statement as to the present condition of the pass examinations, their efficiency, or their shortcomings. At least two important questions will remain—the first, how far the Council can or should inquire, not necessarily for criticism, but for information and suggestion, into the means and appliances for education in the several schools, a question so keenly discussed of late in relation to the teaching in this metropolis and the universities; the second, what shall be the relation of the pass examinations and the registration titles, to the higher examination, and the so-called higher titles. It is an open secret that these higher titles differ greatly in their actual value, and that some are of no value at all. Yet they are eagerly sought after. It will be generally admitted that the aspiration of students after a title supposed to be of higher social worth to some extent affects the educational arrangements of this country. It is possible that a committee might elicit information which would show this kind of disturbance to be an evil either more or less than is supposed. But the agitation to obtain the title of doctor by new channels, or on easier terms by old ones, shows that the students have sometimes a motive other than that of obtaining more knowledge or proving the possession of higher acquirements. I cannot wholly pass by without notice a Bill, introduced into Parliament by Dr. Lyons, Mr. Gibson, and Mr. Plunkett, to enable the College of Physicians of Ireland to register a title not included in Schedule A of the Medical Act, 1858, and to enable universities to register the title of master in midwifery, and master of obstetrics, or master in obstetric science. Nor can I omit to notice the action taken lately by the University of Oxford in the way of utilising the diplomas of surgery of the Royal College of Surgeons rather than institute at present a new surgical title in England. Both actions are useful as calling attention to the vexed question of the real or imaginary evil of numerous qualifications—an evil which would be almost imaginary, supposing that all education and all examinations could be exactly equal. I pass to another topic—that, namely, of the questions which arise under the penal clauses of the Act. Sooner or later these clauses will demand revision. The Council in its early days declared that it had not the duty of a prosecuting body; and on May 24th, 1877, it came to the conclusion that after mature deliberation it saw no cause for the determination then arrived at. Its legal functions in regard to prosecutions are administrative and judicial. Inasmuch as illustrations of this fact will appear during this session, the subject need not here be considered in detail. It is now sufficient to note that there is a tendency to exercise pressure on the Council to undertake criminal inquiries. There is, perhaps, no great willingness on the part of the Public Prosecutor in England to take this work off our hands. On this matter the Council's solicitor has full information at your disposal. Thirteen cases of alleged misconduct by registered practitioners have been referred in the past year to the solicitor. Almost all these cases have been complaints against men professing to be qualified who are not qualified, or men who are qualified but act with unqualified persons either as partners or as assistants. They are usually cases which would, *primâ facie*, justify investigation. The complainants generally desire the Council to take up the inquiry, or to pay their solicitor to do so. Their view is that it is the duty of the Council to undertake prosecutions, even against persons who are not on the Register, as well as to punish *proved* offenders who are on it. Mr. Farrer has observed to me that though there may be cases in which the Council might properly undertake prosecution, it should not be the rule upon every charge brought before it. The Council are judges with a formidable power of severe punishment without appeal, but they cannot compel sworn testimony; the machinery for hearing cases and sifting evidence is cumbrous, expensive, and involves serious loss of time; and their only sentence, removal from the Register—for they cannot suspend—may be much the same as ruin. It is Mr. Farrer's *opinion* that offenders should be summoned, when the cases against registered practitioners are so far complete as to be without doubt in the absence of satisfactory explanation. Some of the cases are certainly such as should be brought before the ordinary tribunals. It is much simpler to judge of the professional misconduct in a case that has been tried for some offence according to law, and legally convicted. Several years ago the President of the Board of Trade brought two cases of drunkenness before the Council, and the Council declined to interfere. The Council then thought that it could not undertake to investigate charges of drunkenness. Yet such charges might involve cases of the gravest dereliction of duty—and they, in this instance, did so. But the Council then thought it was a case with which the Government should deal. Perhaps, too, it felt that, grave as the offence of drunkenness is, the only punishment the Council can inflict—viz., removal from the Register, and, in that way, the loss of the civil rights of a profession—is an excessive punishment. I must not pursue the question whether the several corporations have to exercise the same caution, or are under a greater obligation to strike the names of the persons so offending from off the roll of their members. This subject will appear again in the case of a Scottish practitioner, charged at the last meeting with issuing certain newspaper advertisements. Further correspondence on this matter will be laid before you. I have to congratulate you on the approaching completion of the new edition of the British Pharmacopœia, to which Dr. Quain has given so much zealous attention. It would not become me to attempt to describe the value of this work, and the might of Dr. Quain's labour upon it. In conclusion, I wish to express my conviction that the zeal and energy of the rising generation of teachers in our medical institutions are grappling with the advancing mass of biological knowledge in a manner which, if ever equalled, has never been surpassed; and that the chief fear for the ordinary medical student of the end of this nineteenth century is that he will be oppressed by details in many departments of science, which, though important to the expert, the specialist, and the discoverer, and attainable by exceptional men, are an actual source of distraction to the ordinary clinical student in the precious and too brief years of his student life. Whether Parliament will alter the constitution of the Council, whether it will extend its powers, or whether it will leave it still, with enlarged experience and single intention but without more power to do its work, are questions which I leave to others to discuss. In both political parties of the State there are men of energy too great, perseverance too steady, and public spirit too strong, to be daunted by past difficulties, or to be wanting in the will to give us whatever is needed as soon as our institutions have agreed among themselves to work unitedly with the same zeal that they have ever shown for their individual progress and development; for no political party is able to destroy the independence of institutions while they fulfil their function according to the true idea of a State. But if they do not, or if they are victims of internal dissension, neither party will refrain from seeking to substitute for their old independence the growing force of rigid State control.

Mr. MARSHALL, in moving that the address be entered on the minutes, said he had never heard an address from the chair which contained more important and weighty matter.

Dr. HUMPHRY seconded the motion, which was agreed to.

The Finance Committee having been appointed, the following members of the Council were elected by ballot on the Executive Committee:—Sir H. Pitman, Mr. Simon, Dr. Haldane, Dr. Humphry, Dr. Quain, and Dr. Aquilla Smith.

A table was received showing the results of professional examinations held in 1884 for qualifications granted under the Medical Act by the bodies named in Schedule A.

A table was received showing the number of exceptional cases that occurred during the year 1884 under Clause 20 of the Council's Recommendations on Education and Examination, together with a statement of the action taken thereon by the several licensing bodies.

A table was also presented showing the results of preliminary examinations in 1884, compiled by the registrar from such returns as had been supplied by the examining bodies.

Dr. HAUGHTON moved that the table be referred to a committee. He called attention to the fact that several bodies had sent no information to the Council on the subject, and said he thought that the returns should be sifted in committee before being considered by the Council.

The motion was seconded and agreed to.

The usual returns from the Army and Navy Medical Departments were received and ordered to be entered on the minutes.

A table was received showing the results of professional examinations in 1884 for qualifications granted under the Dentists Act; also a communication from the College of Preceptors showing the results of the preliminary examinations of the College in March last.

Dr. PITMAN called attention to the circumstance that the returns from the College of Preceptors showed that there was almost every year a larger percentage of rejections.

Dr. HAUGHTON said it appeared from the returns that out of 317 students only twelve had passed in mechanics, a circumstance that seemed, he thought, to indicate that there was something in the case of mechanics which the regulations of the Council had failed to reach.

A communication was received in regard to the case of a registered practitioner against whom a complaint had been forwarded to the General Registrar by the Branch Council for Scotland. The Branch Council urged the importance of having the case ready to be dealt with at the present meeting of the Council. The Council deliberated on the subject in private, and were so engaged during the remainder of the sitting. It subsequently transpired that the Council resolved, while sitting in private, that Daniel Sutherland be summoned to appear before the Council on Tuesday next, and also that the name of George Washington Evans be removed from the Medical Register.

WEDNESDAY, MAY 13TH.

Sir HENRY ACLAND, President, in the Chair.

A communication was read from the secretary of the Royal College of Surgeons of England, stating that the diploma of member of the College issued to Mr. Ebenezer Bryceson on April 26th, 1884, had been declared to be void, and that he had ceased to be a member of the College in consequence of it having been proved that before his admission to the final examination he produced forged certificates of professional study.

On the motion of Mr. MARSHALL, seconded by Mr. SIMON, the qualification of Mr. Bryceson as member of the Royal College of Surgeons of England was ordered to be erased from the Register.

Dr. HUMPHRY stated that Mr. Bryceson appeared on the Register as a M.B. of Cambridge University, but as far as he (Dr. Humphry) knew, he had never taken that degree.

The REGISTRAR said that when Mr. Bryceson came to the office he produced what purported to be a document evidencing his qualification, and he filled up the usual form with his name and address as a M.B. of the University of Cambridge.

Dr. HUMPHRY said he would bring this matter before the Council to-morrow.

A letter was read from Dr. J. Wyllie, secretary to the Royal College of Physicians, Edinburgh, stating that at the quarterly meeting of that College, on Nov. 4th last, Bentham Paynter Morison, licentiate of the College, had been deprived of all his rights and privileges as a licentiate, he having been convicted in the Supreme Court of Adelaide, South Australia, of conspiring to cheat and defraud the Australian Alliance Insurance Company, and sentenced to one year's imprisonment with hard labour. At the same meeting of the College similar action was taken with regard to Thomas Robert Horton, who had been convicted in Adelaide of conspiring to cheat and defraud the Australian Mutual Provident Society, and sentenced to two years' imprisonment with hard labour.

On the motion of Dr. HALDANE, seconded by Dr. HERON WATSON, the qualifications of Mr. Morison and Mr. Horton as licentiates of the College of Physicians, Edinburgh, were ordered to be erased from the Register.

Dr. HERON WATSON drew attention to the fact that in October last it was decided that Mr. Horton's qualification as licentiate of the Royal College of Surgeons, Edinburgh, should be removed from the Register, but it still appeared.

The REGISTRAR said that it had been erased from the manuscript register kept in the office, and it was simply a printer's error that it still appeared in the printed book.

On the motion of Dr. HERON WATSON, seconded by Dr. HALDANE, Mr. Horton's name was ordered to be erased from the Register.

Communications were read from the Registrar-General of Wellington, New Zealand, stating that Francis Goold, registered as member of the Royal College of Surgeons, England, 1853, had been erased from the New Zealand Medical Register in consequence of his having been convicted of felony at Auckland on Dec. 2nd, 1876; and that the name of Lloyd Davenport Parry, registered as licentiate of the Royal College of Surgeons, Edinburgh, 1871, had also been erased from the New Zealand Medical Register, in consequence of his having been convicted of manslaughter, and sentenced to four months' imprisonment in the public gaol at Dunedin. It was decided to refer these cases to the Royal Colleges of Surgeons of England and Edinburgh respectively.

A letter was read from Mr. Farrer (solicitor to the Council), stating that Daniel O'Hara, alias Owen Patrick O'Hare, had been condemned to ten years' penal servitude for levying black mail.

The REGISTRAR stated that he had received an extract from the *Liverpool Mercury* of May 9th, from which it appeared that Mr. O'Hara had committed suicide in Walton Gaol, by hanging himself with a towel.

The Council resolved to await further communication from their solicitor before coming to any decison on this question.

Some correspondence was read between the Executive Committee and the Irish Branch Council. A resolution was adopted by the Executive Committee on Jan. 23rd, 1885: "That in the opinion of the Executive Committee it is desirable that the several Branch Councils should contribute the funds required for carrying on the business of the General Council at such times as they may be required to do so by resolution of the Executive Committee." In answer to a communication to that effect, the registrar of the Irish Branch Council had written, stating that at a meeting of that branch on March 24th it was resolved: "That this Branch Council are not prepared to forward the funds at such times as they may be required to do so by resolution of the Executive Committee."

Sir HENRY PITMAN said that it was quite time that some better arrangement should be made with regard to the funds which were provided for the payments of the expenses of the Council. When he was appointed one of the treasurers he found that there was no money whatever to deal with. No account stood in the bank in their names, and very little money was received during the year on behalf of the Council. It was therefore rather an anomaly to have two treasurers. In the returns presented to the Houses of Parliament for the year ending Jan. 1st, 1884, the contributions by the English Branch Council to the General Medical Council appeared as £1682, by the Scotch Branch Council £636, and by the Irish Branch Council £473, but those contributions were never furnished. Every year they were returned as facts, but they were not so; it was evidently an irregularity. It was really a debt due, and he had no doubt that the Irish and Scotch Branch Councils might be trusted to pay the amounts at their convenience, but they did not do so during the year. On the other side of the account, the cash balance in the bank in favour of the Scotch Branch Council was £900, less due to the English Branch Council £636, which was credited as having been paid during the year before. The expenditure of the General Medical Council amounted to £3014 5*s.* 7*d.*, and the receipts out of which the treasurers had to pay that amount were £221 14*s.* 8*d.* Even that £220 was not in the treasurers' hands in the beginning of the year. It was derived from the sale of Registers and Pharmacopœias, &c., so that the treasurers started with the liability of the rent and expenses of the office. Some of the members of the Council would recollect that there had been occasions when there had been no money to pay their fees at the conclusion of a session, the Branch Council not having sufficient funds in hand, and the members had to wait for their cheques. The English Branch Council were not bound to advance £3000 a year for the General Council's expenditure. This, however, was too delicate a matter to be dealt with in the Council, and he therefore proposed: "That the communications with the Irish Branch Council be referred to the Finance Committee, and that the Finance Committee be requested to submit to the General Medical Council a scheme which will render it unnecessary in future that the Branch Council for England should advance the money required to meet the current expenses of the General Medical Council." In dealing with the national funds, the Chancellor of the Exchequer at the beginning of a year provided for payment of all his accounts, and he did not see why the Council could not do something of the same kind. Why could not the Finance Committee make a forecast, and say, "During the year we shall want so much." Each Branch Council would then pay its proportion, and the General Council might open an account at the Bank of England, from which it could draw its money to pay expenses.

Dr. HAUGHTON seconded the motion. He considered that the present relations with the Branch Councils were most unsatisfactory. The only fault he found with the Executive Committee was that they had not enough knowledge of the English language to use the right verb. If they had "requested" instead of "required," the difficulty might have been settled at once; but he allowed no man to "require" him to do anything. It was, however, quite reasonable and proper that the Irish Branch Council should advance the money, and they were quite willing to do so.

Mr. MACNAMARA reminded the Council that some years ago a committee, of which he was chairman, strongly recommended that all the money of all the Branch Councils should be given to the General Medical Council. The English Branch Council objected to that, because at that time they had a large sum of money; but one-half of it lawfully belonged to the Irish and Scotch Branch Councils, because it was derived from registering in London degrees conferred in Ireland and Scotland. Many years ago the grievance was ventilated, and in some cases the English Branch Council was called upon to refund the money to the other Branch Councils.

The resolution was agreed to.

A letter was read from the Secretary of State, requesting information as to "upon what conditions foreign doctors are allowed to practise in England." The information was required by the Danish Minister.

The Registrar was directed to forward to the Secretary of State the clauses of the Medical Act bearing upon the subject.

Communications were laid before the Council from the India Office, the Army Medical Department, and the Navy Medical Department, relating to returns which the Council had asked for.

On the motion of Dr. Struthers, seconded by Dr. Haughton, the Registrar was directed to thank the Secretary of State for India for his communications, and to state that a return applying to the examinations for the Indian Medical Service held in London, similar to that furnished to the Council by the Army Medical Department, would be satisfactory to the Council.

Mr. Marshall moved: "That a committee be appointed to superintend the preparation of statistical returns relating to the medical profession of the United Kingdom; that the committee be empowered to expend on these investigations such sums as may be sanctioned by the President and Treasurer." There were, he said, several subjects which might be usefully considered by the proposed committee, as to which the Council had full information in its possession; and nothing would render the proceedings of the Council more valuable than complete statistical returns with reference to those subjects. One of them was the question of waste and supply in the profession, with regard to which opposite opinions had been expressed. Another related to the career of medical students; and a statistical return on the subject, like that made by Sir James Paget with reference to the career of a thousand students at St. Bartholomew's Hospital, would be both interesting and useful. The duration of study was also a matter of interest, as to which statistical returns could be made by the Council; and the results might show whether fresh legislation was necessary. Another matter for inquiry was the question of single qualifications, and the number of persons taking additional qualifications. So far as the present partial statistics went, it appeared that there had been a gradual reduction of single qualifications from 26 per cent. to about 14 per cent., but more complete information on the subject was required. Other questions would also suggest themselves to the committee as fit subjects for statistical returns, and he thought that a good deal of useful information would result from their labours. The expense of the inquiry would be slight, and the Registrar would be able to render valuable assistance in its prosecution.

Mr. Simon seconded the motion, which, he said, had his cordial support and sympathy.

Dr. Struthers asked if Mr. Marshall had any controversial object in view in his proposal, and suggested that the subject should be postponed until a more definite statement was made of the nature of the statistics proposed to be obtained. He also thought that the committee, if appointed, should be a larger one than had been suggested. A committee of three would be too small.

Dr. Haughton supported the motion, and said he thought that the proposed statistics would prove very interesting to the profession and the public. The discretion of the committee might be trusted as to the particular subjects of inquiry.

Dr. Duncan also supported the motion, but wished to have the opinion of the treasurers as to whether the expenditure involved would be a legitimate one.

Sir H. Pitman said, if it could be shown that the inquiry was for the purpose of the execution of the Medical Act, the expense would be perfectly legitimate.

Mr. Macnamara supported the motion, and suggested as a subject of inquiry the question where students have been educated with reference to where they have been registered. The result, he thought, would be surprising, and would show how it was that the English Branch Council was so rich, and that the Irish and Scotch Branches were so poor.

The President pointed out that the work of statistical returns had been well begun by the Registrar, and would no doubt be usefully extended by the proposed committee.

The motion was agreed to.

On the proposal of the names of the committee—Mr. Marshall, Dr. Haldane, and Dr. A. Smith,—

Dr. Struthers again urged that the committee should be larger; but, after a short discussion, withdrew the suggestion, and the committee was appointed.

Communications were read in regard to the General Medical Council's amended regulations for the preliminary examinations of medical students from the University of Dublin, the University of Oxford, the University of Cambridge, and Queen's College, Cork.

Dr. Haughton said that the letter from the Dublin University had been carefully considered, having been drawn up by himself and amended by the provost of Trinity College. It would be seen that the University peremptorily rejected the mode of teaching and examining in mechanics proposed by the Council, and said that they were not prepared to alter their method, which they regarded as superior to the one which the Council had recognised. None of the bodies had given a more hearty support to the Council than the University of Dublin when it saw that the proposals of the Council were an improvement on existing methods, and it was still willing to recognise the paramount authority of the Council on subjects relating to the final examination. But in regard to subjects of the preliminary examination, mechanics, physics, &c., the Council ought not to expect the University to abandon its well-considered plan of teaching. On all matters connected with the professional curriculum it was ready to yield, but not in regard to subjects of general education. If the resolution passed by the Council at its last session were continued, the students would cease to appear on the Students' Register. That would not be desirable, because the students would be able to say that they had ceased to appear there because they aimed at a higher education, and it would lead to the supposition that the Register only contained the names of minimum educated students. Under the circumstances he did not propose to vote for the motion about to be brought forward by Dr. Humphry.

Dr. Humphry proposed: "That the examinations in education conducted by the universities be accepted as heretofore, but that if in any of these examinations the subjects of elementary mechanics of solids and fluids are not included, a knowledge of these subjects should be required at a subsequent examination." The President, he said, had in his opening remarks stated that the Legislature had intended the Council not to be mandatory but hortatory, and if that applied to medical studies *a fortiori* it applied to general studies. It could never have been the intention of the Legislature that the Council should be mandatory on the university in reference to general studies, and still less to the particular mode in which an examination in English should be conducted. The great work of the universities was connected with the general education of the students, and the examinations were conducted in what was considered the best manner by men who had given their lives to the consideration of the subject. The Council had almost always taken that view: it had been anxious that the general education of students should fall into the hands of the universities, and had passed several resolutions to that effect. The examinations conducted by the universities were of a high order, the requisites for admission to the Students' Register being considerably beyond the requirements of the Medical Council, and that the Council should refuse to sanction the examinations because they were not in accordance with its own inferior plans seemed scarcely credible. Every student was examined in Greek as well as Latin, and his knowledge of English was shown by the manner in which he wrote it, which was perhaps the best possible test. He had formerly proposed a similar resolution to that which he now brought forward: but it was suggested that the universities should be requested to give the Council their opinions on the subject. They had done so, and they had given the only answer which could be expected from them.

Dr. Chambers, in supporting the motion, said that the Oxford University had always held that grammar (with logic) was an essential part of education, and that it was best taught by the Latin grammar. It was not likely that the University would change its method at the request of the Council.

Mr. Simon said it was very disappointing that, after giving up a large portion of the last session to the consideration of the subject, they should now be returning to it. It would be impossible to do justice to Dr. Humphry's motion until after the proposed discussion on professional education. He strongly sympathised with the view taken by the University of Oxford as to the undesirability of instituting a special examination in English, which, indeed, he regarded as a delusion. The University stated: "We do not think that the literary character of medical students will be lowered by your not insisting on a special English examination in the case of Oxford students." The question of physics had been before the Council on several occasions, and the view that it had taken was that elementary mechanics should be a part of the earlier education of students, and be passed before registration; but to press such a regulation in the case of the universities, where the subject was taught *in extenso*, was futile and ridiculous. The point on which the Council had continually insisted was that the purely medical curriculum, treated as a minimum, should be relieved from the subject of physics. If five or six years were given to medical education, time could no doubt be spared for a full course of physics, but that was not the case when the medical course only extended over forty-five months.

Sir H. Pitman said he could not help feeling great surprise that the subject should be discussed in the Council in the year 1885, seeing that as early as 1859 it had resolved "that examination on general education should be eventually left entirely to the examining boards of the national educational bodies recognised by the General Medical Council;" and similar resolutions had been passed at subsequent periods. If the Council was of opinion that the examinations in general education should be left to the universities, why should it now be discussing the question whether the examinations of the universities should be recognised by the Council? It could hardly have been the intention of the Council to lay down the precise subjects of examination in general education at the universities; and if it had done so, he doubted whether the universities would accept any such arrangement. The Council had been all along urging the universities to conduct the examinations, and now that they were doing it exception was taken to the mode in which they were proceeding, and it was proposed to refuse recognition on the ground that the examinations did not include mechanics.

Mr. Teale thought that the Council would be placed in an absurd position if it declared that the university examinations were not sufficient for its purpose.

Dr. Watson said the subject had been thoroughly threshed out on previous occasions. They had again and again expressed their confidence in the action of the universities and their competency to conduct examinations for preliminary education, and it was hard that those bodies would not do what the Council required, but would insist on doing something that the Council did not want. There was no reason why a student who had passed a higher examination should not have a separate examination for mechanics, in order that all medical students, wherever taught, might be placed on the same footing. To have a student coming up without having passed the examination in elementary mechanics created extreme confusion in regard to all licensing bodies, and there was an uncertainty as to whether the student still required to be subjected to such an examination before he was permitted to go in for a professional examination. Again and again men had come up for the professional examination, and after they had passed it had been discovered that they had not passed the examination in elementary mechanics. There ought to be one rule for all students, whether coming from the universities or elsewhere; and if the universities would not conduct the required examinations, there were other bodies that would. If the universities carried out their threat, and allowed their students to go on without registration, all he could say was that those students might undoubtedly obtain university degrees, but they would not be able to obtain licences to practise from the corporate bodies. If the Council had, after repeated consideration, come to a definite conclusion on the subject, it ought to adhere to it until it had a better reason for reversing it than that the universities declined to accept it.

Dr. Struthers said that the Council had already by a large majority passed a resolution as to English, and it was absurd to ask it six months afterwards to reverse its decision. The Council had also decided that elementary mechanics should be passed before registration, and it would be a complete waste of time to reopen the question. The only reason for reconsideration was the opinion expressed by the universities. What would be said if one of the Scotch universities had tried to defy the Council in the same way? Surely, the universities could easily institute examinations in the required subjects; and if they would not, there was the College of Preceptors, whose examinations met all the requirements. He moved as an amendment: "That in reference to the letters now received from the University of Dublin, the University of Oxford, the University of Cambridge, and from Queen's College, Cork, the Council sees no reason to depart from the resolutions adopted at the last meeting in regard to preliminary examination for the registration of medical students."

Dr. Watson seconded the amendment.

Dr. Pettigrew supported the amendment, and expressed a hope that Dr. Humphry would withdraw his motion.

Dr. Banks supported the motion. The Oxford examination in English was perfectly adequate; and as to Dublin University, it could not be expected to alter its regulations at the bidding of the Council.

Dr. Duncan, in supporting the motion, said it would be preposterous for the Council to say that they would not be satisfied in regard to English with what satisfied the University of Oxford. The difficulty as to elementary mechanics, which was not included in the preliminary examination at the University of Dublin, would be easily overcome by Dr. Humphry's proposal that the subject might be taken in a subsequent or separate examination.

Dr. Haughton said there was no desire on the part of the universities to act offensively towards the Council. As to the subject of elementary mechanics, it ought to be taught in the same way to all students, whether medical or otherwise; and at present it was certainly not taught efficiently in the schools.

The debate was then adjourned.

Thursday, May 14th.

At the meeting of the Council to-day, the debate on Dr. Humphry's motion was resumed, and after some further discussion the motion was agreed to in the following modified form:—"That the examinations in general education conducted by the universities be accepted as heretofore; but that if in any of these examinations the subject of elementary mechanics is not included, a knowledge of that subject be required at a separate preliminary examination." The amendment of Dr. Struthers was withdrawn. A report was received from the Pharmacopœia Committee with a revised copy of the new Pharmacopœia. A cordial vote of thanks was given to Dr. Quain for his valuable labours in connexion with the work. A report was presented from the Committee appointed to make inquiries as to possible sites available for the purposes of new offices for the Council. The Committee reported in favour of a site on the Savoy estate of the Duchy of Lancaster. The general feeling of the Council was adverse to the suggested change; and after discussion it was resolved to refer the report to the Executive Committee, with power to take steps to improve the ventilation of the hall in which the Council meets; or, if necessary, to report on the improvement of the building at the next meeting.

Dr. Pitman then moved: "That a committee be appointed to consider and report in what way, if any, the accumulated funds of the General Medical Council can be applied in promoting scientific research for the public good."

The debate on the motion was adjourned, when the Council rose.

STRANGULATED OMENTAL HERNIA.

To the Editor of The Lancet.

Sir,—I regret to have overlooked until to-day Mr. Treves' letter in your impression of April 25th. But I do not propose, at present at all events, to repeat, extend, or multiply the arguments I can muster, having already been favoured, on May 17th, 1884, and April 25th last, with space ample for the purpose. In the communication of a year ago Mr. Treves will find, I think, the answer to his objections. But even should he not be convinced on reading it again, I would prefer to wait till, as he well puts it, my "arguments have been supported or opposed by more extended clinical data, and when they have met fully the test of the post-mortem room." I am glad that he has taken up the subject, for the more it is noticed the better its chances of thorough ventilation, not so much on paper as in the thought and practice of surgeons, in the presence of illustrative cases.

I am, Sir, yours truly,

Rushton Parker.

Liverpool, May 10th, 1885.

THE LANCET.

LONDON: SATURDAY, MAY 16, 1885.

THE most interesting event which has transpired up to the present time at the meeting of the Medical Council is the Address of the President, Sir Henry Acland. The number of the subjects lightly touched upon give interest to the speech. The President's gentleness of touch is his great quality. One occasionally comes to a point at which strength and determination of language would be a relief. Failures, delays, and disappointments, that move less serene men than Sir Henry, only bring out his imperturbable suavity; and the most imperfect settlement of public questions, over which the profession grieves, he views with an equanimity such as Darwin might display over the slow processes of Evolution. In the early part of his address he recalls the happiness with which he had met the Marquis of Ripon, and had reminded his lordship of his efforts fifteen years since in favour of medical legislation. It is all just where it was where the Marquis left it. Nineteen corporations are all fighting for their own hand, and the weak hand of Parliament has been shown to be powerless in the matter. But to Sir Henry Acland's happy mind there is no disappointment in all this. He told the Marquis that he sincerely believed that though he had failed, thanks to the honest rivalry among teachers and between institutions, "the principles" were being carried out, and the public good secured. We can only look on at a distance and admire this power of seeing unmixed good in the failure of all Governments to accomplish what the Government and the profession thought necessary for the public good, and what a Royal Commission recommended. The report of the interesting incident of a conversation between the Marquis and the President would have been a little more interesting if Sir Henry had told us the Marquis's views of the situation and of the obstinate resistance of the medical authorities to changes for the public good.

The first day of the Council's meeting was occupied very largely with the discussion of a case of alleged misconduct. It is very painful to find from the President's address that no less than thirteen cases of alleged misconduct by registered practitioners have been referred in the past year to the solicitor. These largely have reference to unqualified practice—registered medical men acting with unqualified persons as partners or assistants. We have often cautioned medical men against conduct of this kind, which brings the profession into discredit and its members often into positions of much embarrassment. The Council will have the full approval of medical men generally in exercising its judicial powers against members of the profession who act unworthily. It is unsatisfactory to notice from the President's address that there is still much uncertainty and difference of opinion as to where the duty and power of prosecuting offenders should lie. The Corporations seem very reluctant to vindicate the honour of the profession, though always ready to tell Parliament that their moral influence alone preserves the high standard of professional opinion and conduct. The Public Prosecutor shows great unwillingness to do work for which, one would suppose, he was brought into existence. And the Medical Council, from its earliest days, has discouraged the idea that it had any prosecuting function. In regard to this duty of prosecuting for breaches of the Medical Act, all the parties that should have acted have made excuse, and too often the work has had to be done by private medical men or medical associations organised for the purpose. Since the Home Secretary, in his plain way, expressed his opinion that the Medical Council has duties of judgment in regard to such cases, the judicial functions of the Council have come into more frequent action, and a great part of the present programme is filled with motions having reference to cases of alleged misconduct. In one such case, as will be seen by our reports, the Medical Council has erased from the Register the name and qualification of George Washington Evans, who was no less than a Fellow of the Faculty of Physicians and Surgeons of Glasgow. His publications and advertisements on the subjects of diseases of women and debilities of the generative organs constituted, in the opinion of the Faculty, "infamous conduct in a professional respect," and led to the erasure of his name from the Register of Fellows on December last. The Medical Council has endorsed the action of the Faculty.

The inevitable discussion on Preliminary Education has begun; but it really seems as if the Council was going to be deprived of the pleasure of its full development on this occasion. Some of the members begin to see that there is something bordering on the jocose in its treatment of this subject. Not only does it turn up annually, but, as Sir Henry Pitman showed on Wednesday, the continuous idea of the Council from its first meeting in 1859 has been to rid itself of all responsibility in regard to preliminary examinations, having voted repeatedly in favour of leaving them entirely to the Universities and other national educational bodies. But having almost effected this result, they keep on worrying these bodies, and dictating to them how to do the work. The consequence is not only that the Council wastes time which it might well devote to improving strictly medical education, but it receives protests from the Universities which, though couched in polite language, are not destitute of pungency.

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THE *American Journal of the Medical Sciences* for April contains a careful and useful paper, by Dr. Winslow of Baltimore, on the Operative Treatment of Pyloric Stenosis. In the forefront he places pylorectomy, and gives a table of sixty-one cases of this operation. From it we learn that there have been sixteen recoveries and forty-four deaths, while in one case the result is not given. Billroth has operated eleven times, with success in six cases, and his results are the best that have been yet attained by any surgeon. The mortality in cases of cancerous stricture of the pylorus has been 76 per cent. The factors which seem of chief importance in determining the result of the operation are the age and general condition of the patient, the existence of extensive adhesions between the pylorus and the neighbouring organs, particularly the pancreas, and the length of time occupied in the operation. The younger the patient the greater the power of resisting collapse. The presence of adhesions not only greatly adds to the difficulty of the operation, and therefore to the time required in its performance, but it renders the danger of hæmorrhage and of subsequent peritonitis greater; while in some cases gangrene of the transverse colon has occurred owing to removal of the omentum and transverse mesocolon. Nearly 50 per cent. of the patients operated upon have died of shock within twenty-six hours, and of the cases which have recovered not one has lived for three years without recurrence of the disease when the operation has been done for cancer. Gastro-enterostomy, by which the stomach is made continuous with the small intestine beyond the pylorus, has been performed thirteen times during the last four years. Of these nine have died within a month of the operation, and four, or just over 30 per cent., have recovered. This is a better result than was obtained in the early cases of pylorectomy; and when it is borne in mind that the operation has been done in cases of cancerous and other strictures of the pylorus, in which the adhesions have been so extensive as to render impossible or nearly impracticable the operation of pylorectomy, it is evident that the balance in favour of gastro-enterostomy is greater than the mere figures show. The operation consists in raising a loop of small intestine and, after making an incision into its free border and into the stomach, uniting them by sutures. It is thus a shorter and simpler operation than pylorectomy, and does not expose the patient to the same risks from shock or hæmorrhage. It has been urged against it that it is in no way radical, that it only palliates the disease, and allows the new growth to extend and exert its deadly influence upon the system. This is no doubt true. But, on the other hand, it is to be remembered that the success in the radical cure of cancer in the situations most favourable for it has not been such as to render it probable that surgery will ever be able to cope effectually with this disease when it attacks the stomach, and the results of pylorectomy thus far point in the same direction. Gastrotomy, gastrostomy, and duodenostomy have all been performed for cancer of the pylorus, but, for various reasons, are sure not to be widely practised or even repeated again. *Digital divulsion of the pylorus*, or Loreta's operation, has been practised with great success for cicatricial stricture of the pylorus. Of five completed cases three recovered, and a sixth case was doing well three days after the operation. It is, of course, quite unsuited for cancer of the pylorus, but in cicatricial stricture of that orifice it gives speedy and complete relief, and the procedure appears to be free from much of the danger attending the graver operations we have been referring to. Among Dr. Winslow's conclusions, which, we believe, are thoroughly supported by the evidence at hand, are these: that pylorectomy for carcinoma should only be performed in the limited number of cases where, with marked stenosis, the pylorus is not adherent to the neighbouring structures and the patient is young and fairly strong. In other cases of cancerous stenosis gastro-enterostomy should be performed. In cicatricial stenosis digital divulsion of the pylorus should be performed when the symptoms are sufficiently severe to demand operative interference.

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Discredit was for a long time cast on the attempts to explain the prevalence of certain epidemic diseases by referring them to meteorological conditions, and this was to a great extent deserved, because those who at that time interested themselves in this subject were content to assert that this or that epidemic owed its prevalence to what they were pleased to term "climatic" or "telluric" influences, without any apparent effort to ascertain or explain what were the precise conditions which had been operative, and which were disguised under such general terms as we have referred to. During later years, however, the attempts to ascertain how far meteorological conditions influence the prevalence of disease have been on a much more scientific scale, and medical officers of health are, in their annual reports, now in the habit of making records bearing upon this influence, which cannot fail in the long run to be of material value. Mr. C.E. Paget, medical officer of health for the Westmoreland Combined Sanitary District, makes a contribution to this subject in connexion with a detailed review of the prevalence of "fever" in the borough of Kendal since the passing of the Registration Act. During the early portion of the period referred to, "typhus" was the prevailing fever, but it gradually changed its name as years went on, until it became evident that, although typhus might not have been altogether absent at certain periods, it was really enteric fever that Kendal has had to deal with. During the decade 1842-51 the mean annual "fever" mortality per 1000 of the population was 1·58; in the decade 1852-61 it was 0·70; in the decade 1862-71 it was 0·41; and during that ending 1881 it had further fallen to 0·26. The steady decline in the mortality is attributed in the main to the progressive sanitary improvements which have taken place, but when the separate prevalences which examination of the death-rates exhibit are studied it would appear that other influences have been at work; and Mr. Paget has made every endeavour to ascertain how far these influences may have had to do with prevailing meteorological conditions. The value of the earlier records available were found to be much affected by the circumstance that only the mean annual variations could be learned, and so it comes to pass that as regards rainfall, for instance, whilst it is almost undeniable that in Kendal there have been occasions when an excessive fall of rain has been associated with a rise in the prevalence of enteric fever, yet mean annual records alone do not help much in deciding the question. Such mean records as to the state of the barometer are still less helpful, and hence, although Mr. Paget is convinced that sudden depressions in the mercury, especially when associated with excessive rainfall, have favoured special prevalences of this fever, yet he is obliged to base his opinion rather on certain recent occurrences than on any observations extending over a series of years. The temperature records, though also limited to annual means only, were found to be a little more helpful, the rise and fall in the total mortality from continued fever corresponding in a more or less degree with a rise and fall of the mean annual temperature in twenty-nine of the years between 1838 and 1881; variations to the contrary only being indicated in four of the remaining seventeen years. In view of the imperfect means at his disposal, Mr Paget does not attempt to lay down any general conclusions, and it is evident from his report that he would be the first to admit that when meteorological conditions influence the rise and fall of the mortality from any special disease, this influence may be largely, if not in the main, brought about by the operation of these conditions on purely local states, which, being absent elsewhere, might prevent any similar conclusions being arrived at in other places. Thus, in one special outbreak of enteric fever which is several times adverted to, it seems all but certain that the conditions of sewerage which existed at that time in Kendal constituted a local state on which meteorological changes could operate with special force. The incidence of the disease fell chiefly on a portion of the town having deficient sewer ventilation, and it is precisely under such circumstances that heavy rainfall, which would force foul air out of the sewers at every available weak point in the system, together with a diminution of barometrical pressure which would aid in the expulsion from the soil into the atmosphere above of any accumulation of foul air from sewers or elsewhere, would tend to bring about one of the very conditions so well known to be associated with prevalences of enteric fever. We by no means wish to suggest a limit to the operation of meteorological conditions by explaining away any direct influence they may have upon disease; but merely to indicate that, with the very imperfect knowledge we at present possess on the subject, the study should be approached with all scientific caution. Many of the observations which can be made by officers of health must almost necessarily be limited to comparatively small areas, but when put together they will aid in the solution of a very difficult but most interesting subject. Hitherto not many medical investigators have been attracted to its elucidation, but such reports as the one we are now discussing, and the carefully prepared papers which are from time to time communicated to the Epidemiological Society by Dr. G. B. LONGSTAFF, all tend in the direction indicated.

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MRS. GRANT DUFF, the wife of his Excellency the Governor of Madras, has recently presided over a meeting, at Madras, for discussing the establishment of a hospital there for the Hindu and Mahummedan women whose religious feelings and social duties preclude them from seeking the aid of medical men. The speech delivered by MRS. DUFF at this interesting meeting, which seems to have been attended by all the notabilities of the Presidency, native as well as British, abounds in good sense, refined feeling, and the truest appreciation of those silent but potent influences which are most likely to assimilate our great Indian Empire into our own national family. In addition to this matter of good sentiment, in the speech there is much light cast upon the present state of medicine in India. There is, we are told, no institution in Madras to which Gosha women can go without violating their religious feelings. The caste wards of the General and Lying-in Hospitals are under the superintendence of men, and into them a Gosha woman will rarely enter, except as a last resource, and when human aid is no longer of any avail. We are also informed that the greatest suffering, ending sometimes in death, is caused by unskilled and unqualified female practitioners throughout India.

To meet these two difficulties the new institution is started. The original conception of it is due to Surgeon-General CORNISH, who, with his usual happy facility for foreseeing great results from unpretending projects, when they are set in the mind of the world in the right way, called the attention of the Government to the subject last year, and led the Government to determine that, so soon as the natives expressed a strong desire to have the suggestion carried into practice, it would give its support. That expression, led off by a native gentleman, Mr. RAMASAWENEY, having come "in a very liberal form," the initiatory stages of the project may be considered as over, and the prospect of the existence of a great and useful institution is fairly in view. The work intended to be carried out at the hospital will be the teaching of the practice of medicine by the European methods, with all the resources of modern science; the selection as teachers and practitioners of none but those whose status is of competent worth; the performance of important surgical operations which cannot at present be done from the want of a suitably fitted up hospital; and the introduction of the necessary requirements for a school where diseases of the eye, and other diseases requiring particular and advanced skill for their successful treatment, can be combated. The hospital—as Mr. AIGER, one of the prominent supporters of the movement, explained—will be under the superintendence of a lady, who will induce lady patients to visit it; "and thus, while the scientific system of dealing with disease will be adopted, the ignorant practitioners will be gradually cleared away." It is intended for the present to have from twenty to twenty-five beds for in-patients, to increase the number as the demand for accommodation extends, and to have consulting-rooms for caste and Gosha women. The QUEEN-EMPRESS is to be asked to be patroness; her Excellency, Mrs. GRANT DUFF, vice-patroness; and native ladies throughout the Presidency are to be solicited to give their countenance and support, and a considerable amount of money has already been subscribed. In the new design the scope for the kind of labour very suitable for women is of the widest; and if something like it were instituted in all our dependencies, where native habits have to be conciliated, so much the sounder would be the union between the centre of power and the radius of it.

Annotations.

"Ne quid nimis."

THE ARMY MEDICAL SERVICE IN THE SOUDAN.

IN the discussion last week on the vote in the Army Estimates for medical establishments, the question of the relation of the National Aid Society to the Army Medical Department was brought under notice by Dr. Farquharson. The statements which have from time to time been made as to the benefits conferred upon the army by the Society and the inferences which have been drawn as to the inefficiency of the Medical Service, if it required, in the interests of the soldier, to be supplemented by this voluntary and irresponsible aid, certainly seemed to call for some explanation. Dr. Farquharson, therefore, without wishing to undervalue any service the Society might have had it in its power to perform, asked who was responsible for the care of the sick and wounded, and whether there was any deficiency in the supplies of necessaries and even of superfluities furnished by the Army Medical Department. The financial Under-Secretary for War, while claiming for the National Aid Society that it was doing good work in Egypt, distinctly laid down the principle that the Army Medical Department was "not only primarily but entirely responsible for the care of the sick and wounded, but this responsibility did not impair the recognition of the generous and charitable aid rendered by the Society." We still hold strongly to the opinion that as the Government is bound to provide all that may be requisite for the sick and wounded soldier, and has in the present campaign made abundant and liberal provision for all their wants, the operations of the National Aid Society would have been much more deserving of praise had they been directed in favour of the wives and children and of the widows and orphans of the soldiers, for whom no adequate provision is made by the Government. We have considerable doubts as to the benefits conferred by the present working of the Society; we have none as to the claims of the widows and orphans upon the kindness and benevolence of those who have it in their power to aid them. It is very satisfactory to find that there has not been the slightest complaint of any shortcoming on the part of the medical staff, either as regards personal service or the requisite supplies, and in the absence of such default it is difficult to understand how the expenditure incurred in supplementing that which is already sufficient can be justified.

THE NEW BRITISH PHARMACOPŒIA.

On Thursday afternoon the Pharmacopœia Committee, through its chairman, Dr. Quain, were able to report the virtual completion of the new Pharmacopœia and to place a copy on the table. Much satisfaction was expressed with the work, and high praise accorded to Dr. Quain and to the editors of the work, Professors Redwood, Bentley, and Attfield, for the way in which they have performed their respective duties. The revised Pharmacopœia contains over 100 pages of new matter and over 100 new articles, including coca, jaborandi, apomorphine, boric acid, thymol, menthol, iodoform, &c. The volume will be sent to the members of the Council for their suggestions. After these have been discussed and disposed of by the Pharmacopœia Committee, this committee will forward the work to the Executive Committee for publication.

THE ARMY IN THE SOUDAN.

The public have at length received from the Ministry an indication of the course which they mean to take with reference to the troops now serving in the Soudan. Three courses appeared to be available as regards the army in the interior; to maintain their present position, or to concentrate at Dongola and places below Dongola, or to revert to the line of Wady Halfa or Assouan as the effective frontier of Egypt and withdraw the troops as soon as possible from the advanced positions now occupied. The Government has decided to adopt the third course as soon as the rise of the Nile, which is expected to begin in about three weeks, shall enable the movement of the troops and stores to be effected. Lord Hartington stated that the troops at present are fairly protected by huts or other temporary cover, and that although the heat is very great, and the inconvenience and suffering they have to undergo are very considerable, their health has not materially suffered. This change, when effected, will enable the authorities to withdraw a considerable portion of the 9000 men now occupying the posts in the interior. With regard to the force at Sawakin, the Ministers do not seem yet to have been able to make up their minds as to what they mean to do. They have given up the idea of carrying on to Berber the railway recently begun, but to what extent they will remove the troops, or what provision they will make for their maintenance at Sawakin appears to be still among the problems which our rulers find themselves unable to solve. The fears which we have expressed as regards the health of the troops at Sawakin seem to be entertained also by Lord Wolseley, for Lord Hartington stated that "he anticipated that if that force is retained there for a considerable time during the hot weather, it may materially suffer in health." But Ministers desire to suspend their judgment as to the course they ought to pursue until they receive further information. The indecision and delay which have characterised the whole of the proceedings with regard to the Soudan appear still to mark the policy of the Government. It is impossible to read Lord Hartington's speech without asking for what purpose has all this expenditure of life and money been made? The thousands of lives which have been sacrificed, the millions of money which have been thrown into the Nile, or wasted in the desert, have produced nothing but sorrow and shame. The events of the last twelve months in the Soudan must ever form a subject of bitter regret and lamentation to every right-thinking Englishman.

EXCISION OF CEREBRAL TUMOURS.

The unusual interest which characterised the proceedings of the Royal Medical and Chirurgical Society on Tuesday last was due to the reading of a paper on the now famous case which has already occupied attention both in the profession and outside it. We have called the case a famous one, because we are of opinion that it will prove to be the first of a long line of more complete successes. That this opinion is not one of exaggerated hope will be admitted by those who are most competent to judge as well as by those whose reason is not clouded by prejudice. It is singularly unfortunate that one of those accidents which not unfrequently mar the most brilliant surgical successes should have arisen in the case in question. That the patient owed his death to an avoidable accident will be readily conceded if it be remembered that there are now on record —and Dr. Macewen added others at the discussion—cases of surgical interference with the brain far more extensive than the operation performed by Mr. Godlee; so that the special merit of the case recorded by Dr. Hughes Bennett merely lies in this. It was a triumph of medical diagnosis; the symptoms alone revealed the growth, which, unless removed, would have proved fatal. There was nothing very remarkable in the surgery of the case, and nothing special about the nature of the tumour. The chief interest was a medical one; and in this connexion we draw attention to the valuable clinical observations of Dr. Hughlings Jackson, which may be read in our report of the proceedings. As was to be expected, the discussion took a surgical aspect, and there is no question that, as Dr. Ferrier remarked, cerebral surgery is still in its infancy. One of the points which future experience must decide is as to the relative value of closing the wound permanently or treating it by free drainage. Experiments on animals and operations on man show that a large effusion of serum is the necessary accompaniment of operations on the brain. Dr. Ferrier and Mr. Horsley, from their experience with monkeys, believe that a permanent closure of the wound at the end of the operation is the right course to adopt. Mr. Godlee, Dr. Macewen, and Mr. Davy appear to hold the opposite view. For them this large effusion of serum and blood constitutes a source of danger chiefly from the tension which it sets up, and which may lead to opening up of the wound, or to worse effects on the brain. Mr. Godlee and Dr. Macewen used the drainage-tube, and Mr. Davy his open-air method of treatment. Another practical surgical point is the mode of dealing with the parenchymatous bleeding from the wounded brain; all authorities recognise the "welling up" of blood in a wound made in the healthy brain. Gliomata are frequently of a very vascular nature, and the occurrence *of spontaneous hæmorrhage into their substance is a frequent accident.* The hæmorrhage during Mr. Godlee's operation was evidently very great, and *it is possible that* the nature of the tumour may partly account for this. However this may be, it is obvious that one of the surgeon's difficulties is the treatment of the hæmorrhage, and the treatment which Mr. Horsley has successfully employed in monkeys—the hypodermic injection of morphia—is worthy of trial in man. Dr. Macewen took exception to the use of the galvano-cautery as a hæmostatic, *on the ground that* by causing much irritation it favoured the production of *hernia cerebri. This must, we think, be a moot point.* There are other surgical points—such as the question of the reimplantation of the trephined bone, the best kind of antiseptic dressings, the mode of dealing with diffuse growths, and the like—which we cannot enter upon now, and which must remain more or less *open questions.*

THE UNIVERSITY OF LONDON.

The annual general meeting of *Convocation of the University* of London was held on the 12th inst. The first business was the election of Chairman of Convocation in the room of Dr. Storrar, who retires. The only candidate for the *appointment* was Mr. Frederic John Wood, LL.D., who was accordingly elected. In support of a vote of thanks to Dr. Storrar for his services during the past twenty-one years, Mr. Wood reviewed the history of the University since 1848, and the part taken by Dr. Storrar in the contest with the medical authorities at a time when the degrees conferred by the University were not recognised. Dr. Storrar, he concluded, had been the true, noble, and *self-devoting* friend of the University. The resolution was unanimously adopted. The question of the matriculation examination, and a resolution affirming that the principle of allowing candidates who have failed *only in one* subject to come up for examination again in that subject is worthy of acceptance by Convocation and the Senate, were referred to the Annual Committee, and the House was shortly afterwards counted out. The ceremony of the presentation of diplomas, exhibitions, scholarships, medals, and prizes to undergraduates and graduates of the University took place on the 13th inst., in the presence of a large assembly.

"WHY NOT EAT INSECTS?"

A great divine has told us that the maxim of *creation* is "Let us prey." We are not, however, prepared to carry this principle so far into practice as to rob the poor birds of their food. Beyond question insects were made for birds to eat; or, to put the fact in another form, birds were intended to eat insects. Man may eat birds, but not birds' food. Mr. Vincent Holt—who for some mysterious reason has set himself to convince mankind that, as we are hereafter to be preyed upon by the worms, we ought to "take it out" of the worms while we can—argues colloquially thus: "Them insects eats up every blessed green thing that do grow and us farmers starves. Well, eat *them*, and grow fat." We prefer a more *logical and* comprehensive policy, and as the insects eat the green things, and the birds eat the insects, we will eat *the* birds. It would not simply be cruel *to the* birds, but *flying in the* face of nature, to interpose between them *and their* food; more particularly as by passing through their bodies and becoming birds' flesh insects are brought *nearer* to our own standard of tissue. If Mr. Holt will only sit down for five minutes and think the question out in its economic as well as its dietetic bearings, he will agree with us that the course of conduct he prescribes would be as irrational as taking to eating grass ourselves instead of feeding on that delicacy by proxy, and afterwards eating our agents in the shape of mutton and beef. If the principle on which Mr. Holt reasons were carried out to the bitter end, there would be an end of *intermediates altogether,* and we should take to living on carbon, oxygen, hydrogen, and nitrogen, with a little sulphur, instead of boiled eggs, for breakfast, which, to say the least, would be both disagreeable and inconvenient. If anything could possibly induce us to eat insects, it would be Mr. Holt's elegant *brochure,* got up with persuasive taste by Messrs. Field and Tuer; but we decline. "Why not eat insects?" *Because the idea of devouring slugs, spiders, and centipedes,* not to mention other more horrorful monstrosities of the edible insect class, is revolting. Life would not be worth living at the price. In dire straits of famine men and women may bring themselves to devour rats and mice and slugs and caterpillars; nay, in such a state of matters, these creatures might come to be considered delicacies. But there is not the least reason why we should, in pure wilfulness, take to filth as food while clean things that do not creep are to be obtained. *Therefore* we say if "*these insects eats* up every blessed green thing that do grow and us farmers starves," let "us farmers" be a little less hard on the birds, and then, instead of being compelled to eat the insects, the birds will do that for them, and they can eat the birds.

PNEUMOTHORAX FOR HÆMOPTYSIS.

At the last meeting of the Clinical Society Dr. Cayley read a paper on a case of profuse hæmoptysis in which he had artificially induced pneumothorax with the express purpose of arresting the hæmorrhage. We refer our readers to our report for the particulars of the case. The question which we have to discuss here is as to the wisdom and propriety of the procedure which Dr. Cayley so boldly adopted. It is well known that hæmoptysis is not seldom fatal in and of itself; it is also familiar to clinical physicians that hæmoptysis which threatens to prove fatal does not unfrequently become arrested by natural processes. Clinical knowledge can at present carry us no further. That the induction of pneumothorax should be a powerful remedy for checking hæmoptysis rests upon sound physiological data. By inducing pneumothorax the lung is placed *hors de combat,* its circulation is reduced to a minimum, its aspirating power on its contents is done away with, and the lung is reduced to the state of atelectasis of a fœtal lung. So that there is abundant physiological justification for Dr. Cayley's procedure. The presence of air in the pleural cavity cannot be regarded as a very dangerous condition, especially if the air be filtered so as to deprive it of its suspended organic particles, and in this connexion the suggestion made by Mr. R. W. Parker in the discussion which followed Dr. Cayley's paper is worthy of special attention. But, again, the sudden induction of pneumothorax may in virtue of its suddenness be attended with such a physiological displacement or disarrangement of natural *processes as to* place the patient's life in jeopardy. Another consideration which must play a part in *coming to a decision as* to whether pneumothorax should be brought about or not is the *question of the state of the lung,* and *this* is a very wide subject. If the lung be the seat of extensive adhesions or of extensive consolidation of no matter what kind, it is obvious that pneumothorax could not be induced, or induced so partially that the necessary arrest of the circulation through the lung would be impossible. Indeed, on reflection, it will be perceived that the class of cases in which the treatment is likely to prove efficient is a limited one. It is probable that in cases of chronic phthisis limited to the apex of the lung, where the profuse hæmoptysis is the result of rupture of an aneurysm, the induction of pneumothorax would cause the circulation to be reduced to such a *low* ebb that the hæmorrhage would be arrested. However, it is almost futile, *in the absence of data, to* pursue the subject further. The operative treatment followed out by Dr. Cayley will probably not frequently come under consideration; but it must be acknowledged that until we know something more of its practical application the question of its judiciousness must remain in abeyance.

SUCCESSFUL ŒSOPHAGOTOMY FOR REMOVAL OF A HALFPENNY SWALLOWED THREE YEARS PREVIOUSLY.

A BOY seven years of age, now in the Queen's Hospital, Birmingham, has a history rarely paralleled in the annals of operative measures for the removal of foreign bodies. The patient was admitted under the care of Dr. Suckling for asthma, for which he had been unavailingly treated. The history was elicited that a halfpenny had been swallowed three years previously, and that dysphagia and dyspnœa followed immediately afterwards. No attempt at extraction was made, and the incident appears to have been forgotten. On admission the child presented all the appearances of chronic starvation, and only the smallest quantity of liquid could be swallowed, the greater portion of which regurgitated. To solids of any kind the passage was impermeable. Dyspnœa was constant, with paroxysmal cough, copious expectoration, and deficient respiration on the right side. The case having been transferred to Mr. Bennett May, that gentleman found the œsophagus impermeable to anything but the smallest bougies at a point beyond the top of the sternum, but all attempts at detection or removal of the cause were fruitless. On the 25th ult. Mr. May opened the œsophagus low in the neck, and, having passed the finger down it, was able to feel a metallic edge through the wall of the tube. The coin lay in front of the œsophagus, apparently between it and the trachea or the right bronchus. As no point of communication could be discovered, a second incision was made in the œsophagus, and through it the halfpenny was with some difficulty withdrawn. A free escape of air from the wound indicated the existence of a communication between the tubes. The subsequent nutrition of the child has presented considerable difficulty, the fluids swallowed regurgitating through the wound. The patient is now fed three times daily by injecting into the stomach through an elastic catheter half an ounce of brandy and an egg beaten up in half a pint of new milk. On the sixteenth day after the operation the child was sitting up in bed, talking cheerfully. He sleeps well, the bowels act twice daily, and the steady improvement in health augurs complete recovery.

"NO DOCTORS AMONG THE PEERS."

WHO was the witty Premier who declined to make an eminent physician a peer because he would not have as an equal in rank any man upon whom he could call for what he was pleased to represent as menial services? The commotion was great in the House of Lords a few afternoons ago when a noble member fell down in a quite ordinary "fit," and when the *reductio ad absurdum* of etiquette was reached, the House being hastily adjourned to admit of the entrance of a couple of commoners to minister to the needs of the sick peer, and when the members of that august assembly were so generally scared that only one peer, the Earl Spencer, had the presence of mind to hurry to the Commons for medical assistance. We do not, of course, intend to imply that members of the medical profession ought to be introduced into that assembly for the sake of having a doctor in attendance; but it is amusing to note how dire is the panic when human nature comes to face, or to be seen facing, death without medical assistance. We are not of those who think the medical profession stands in urgent need of such Royal countenance as would be involved in bedecking one of its members with a coronet. If Art is the better for being patronised, Science can stand alone, and will not languish for the smile fashion withholds from its professors. All the same, the custom so long honoured by a laborious breach of good manners is very crabbed and wondrously weak.

DEATH FROM HYDROPHOBIA.

LAST week Dr. Diplock, coroner for West Middlesex, held an inquest on the body of a journeyman blacksmith, aged twenty-three, who died, according to Dr. Ferris of Uxbridge, with all the symptoms of hydrophobia. The history showed that there was a possible bite from a dog two years previously, but there seems to be some doubt on this point. If the case were one of rabies, the period of incubation was even for rabies, rather long. Seeing that the case is not perfectly clear, it is allowable to speculate on its nature. Now, Dr. Broadbent and others have placed on record cases which have been characterised by all the symptoms of hydrophobia, which were certainly not due to the usual cause of hydrophobia—i.e., the bite of a rabid animal. In the cases in question there would seem to have been a decided history of terror, almost amounting to mania. This terror, or extreme fright, may have been an efficient cause in bringing about those nervous symptoms which are the chief features of rabies, or the terror may have been one of the symptoms of the nervous disease, however originated. The chief symptoms of rabies may be explained on the view of an extremely irritable state of the grey matter of the spinal cord, medulla oblongata, and adjacent parts. This irritable state of an important part of the cerebral nervous system need not always be due to the action of the virus of rabies. Other conditions may bring it about, and some authorities have asserted that acute poisoning by alcohol, and perhaps other substances, may give rise to the same condition. It is possible that the case on which the inquest was recently held was one of this abnormal class.

DEFECTIVE SUPERVISION IN SCHOOLS.

ANOTHER very painful case of death in a schoolboy is reported from Darlington. The very temperate statement of the father of the little boy is given as follows by the *Leeds Mercury*:—

"Mr. David Davison, of Lieben Lodge, Darlington, father of the deceased, was examined, and stated that his son was a healthy boy, and had never been seriously ill previously in his life. On the 23rd ult. deceased came home and said he had been ill-treated by the boys of the fifth and sixth forms, who were from fifteen to seventeen years of age, while his boy was ten years of age. He could not sleep, and complained of his knee being lame and being unable to kneel. He went to school, however, on the 24th, and returned at noon in an exhausted state, complaining of pain in his right leg. He called in Dr. M'Carthy and Dr. Gibb, of Newcastle, but the boy lingered, and died on May 7th. He said that the boys had pulled him down and dragged him about. He said they had done so every day, inside and outside school, wherever they had a chance."

Dr. M'Carthy testified to the existence of inflammation in the knee, and of inflammatory fever. He considered them due to such injuries as the boy described to him and Dr. Gibb as having been suffered. The medical witness was interrupted in giving evidence as to the boy's account of what happened. And the coroner seems to have supported the objection made by a solicitor representing one of the boys of the school. The verdict of the jury was as follows: "They were unanimously of opinion that death was caused by accident, but there was not sufficient evidence to show how." They added that they thought a little more guardianship might be exercised over the boys out of school, though they did not by this convey an imputation against any person. We shall be deeply disappointed if this inadequate verdict is to end the inquiry into this case.

THE INFLUENCE OF SEA-VOYAGING UPON THE GENITO-UTERINE FUNCTIONS.

DR. IRWIN of New York, who has had much experience as a ship-surgeon, finds from observations on 451 women that sea-voyages have very marked influences on the uterine functions, producing emmenagogue and rarely the contrary effects; but amenorrhœa often follows landing after a voyage. Habitual discomforts in menstruation are aggravated, and dysmenorrhœa is the commonest complaint, next to sea-sickness, for which the ship-surgeon is consulted. A sea-voyage is also said to produce aphrodisiac effects on both sexes, but the author thinks that high living, idleness, and the close association of the sexes should be discounted in weighing this effect. Abortion and premature labour, when they occur, are probably due to sea-sickness. Besides acting as an emmenagogue, sea-voyages produce tonic, alterative, and sedative results, and are useful in chlorosis, retarded sexual maturity, uterine debility, sterility, and threatened phthisis.

A RUSSIAN MANUAL OF LARYNGOLOGY.

DR. W. N. NIKITIN has recently published a "Handbook of Laryngoscopy and Diseases of the Larynx" in Russian, the first book on the subject that has appeared in that language. He employs sponges for making applications to the larynx, though he adds that dossils of cotton-wool are more convenient, but, apparently, is prevented from using them by his fear of their becoming detached and falling into the trachea. He uses the term "croup" in an anatomical sense, and speaks of croup of the pharynx, and, according to the *St. Petersburg. Med. Woch.*, a confusion of terms is thus produced which is to be regretted. The same paper thinks that the author would have done more service for Russian medicine if he had translated one of the numerous valuable manuals which already exist in other languages than by his own original work.

A MEDICAL MAN CENSURED.

AT an inquest recently held at the Royal South Hants Infirmary, Southampton, touching the death of a boy named John Arnold, aged thirteen, a very important question arose as to the duties of a charity medical officer. It appears that the deceased injured his finger in a chaffcutter on Thursday, April 2nd, and that on the same day he was seen by Mr. Hutchinson, who advised as to the treatment and ordered the patient to come to him again on the following Saturday. By that time the wound was found to have taken on unhealthy action, which in the course of two days developed into gangrene of the little finger, calling for amputation. Mr. Hutchinson very wisely declined to administer an anæsthetic and perform the operation himself; and, as his partner was ill, he determined to send the case to the infirmary. After the removal of the finger matters went on satisfactorily for a week, but at the end of that time tetanus supervened, and from this complication death ensued six days later. Mr. Matthey, assistant-surgeon to the infirmary, deposed that "if the finger had been amputated earlier a source of irritation would have been removed, and the lad would have had a better chance." This may or may not have been the event, but Mr. Matthey's opinion seems to have been based on the assumption that tetanus is due to irritation of the nerves in a wound, whereas the balance of evidence strongly supports the rival theory of blood infection. No doubt when gangrene has developed and its probable extent is indicated, the sooner the necrosed part is removed the better. At the same time it must be admitted out of simple justice to Mr. Hutchinson that he acted with reasonable discretion in waiting as he did before condemning the injured finger, considering the great vascularity of the parts and the high reparative power of the tissues in youth. It is very easy to find fault with a line of treatment that has failed, and to censure a medical man who has had the misfortune to lose his patient. In Mr. Hutchinson's case, however, we see neither carelessness nor wilful neglect of duty. A slight error of judgment there may have been; but surely this scarcely warranted the rider to the verdict of the jury that "Mr. Hutchinson was censurable in sending the case to the infirmary before first trying to obtain some local medical man to assist him in the operation which required to be performed." Had the patient died whilst under that gentleman's care, it is just possible that blame might have been imputed to the doctor for not availing himself of the resources which a hospital affords. The case is an interesting one, and, we doubt not, will be instructive to medical men holding union appointments.

SURGERY AND ROSE-COLOURED URINARY PIGMENTS.

THE urine of patients who have sustained injuries, or who have been submitted to surgical operations, sometimes exhibits a rose-coloured deposit which adheres to the glass vase, can be easily recognised with the naked eye, and is composed of a peculiar material. M. Verneuil is the author of the above statement (*La France Médicale* of May 2nd). This phenomenon accompanies the concentrated urine which follows injuries. It shows itself soon after the accident, is transient, and lasts from one to three days. It is related in some way to disease of the liver, and is especially liable to appear in the urine of alcoholic subjects. The subjects of this rose-coloured deposit are prone to secondary hæmorrhage and gangrene after traumatism. The strain in which M. Verneuil writes is one of novelty. We cannot believe that the "acid rosacique" to which he draws attention is an altogether unfamiliar object. Unless we are greatly in error, there should be nothing novel in the appearance of rose-coloured deposits in the urine of patients the subjects of hepatic disease, even in the absence of injury. Of the nature of the pigment we have yet to learn a great deal. The fact that hepatic disease is a serious complication of wounds has long been recognised. That rose-coloured urinary deposits specially indicate a tendency to secondary hæmorrhage and gangrene of wounds is a proposition which has probably not been hitherto distinctly formulated. We do not altogether fall in with the interpretation of the doctrines that M. Verneuil has brought forward, but we are convinced that the subject is one which will repay renewed attention.

NOT COCAINE.

COCAINE, the wonderful medicament which anæsthetises mucous membranes, and has simplified many minor operations on the eye, is very costly. Hence we must not be surprised to hear that, in Paris at all events, the manufacturers endeavour to obtain as much of the alkaloid as possible by submitting the coca leaves to a second process of exhaustion. The result is very similar to that which follows attempts to make a second infusion out of already exhausted tea leaves. Certain substances are extracted which are not cocaine, but have nevertheless a remarkable effect on the pupil, causing it to dilate in a marked manner. These substances are derivatives of hygrine, most of which are mydriatics. Eserine is not an efficient antagonist to atropine, but it is to these derivatives of hygrine. Our readers may have observed that different observers have made different statements with regard to the action of cocaine on the pupil. Some have asserted that cocaine has a powerful mydriatic effect, which others have not noticed. The explanation appears to be rendered patent by the above-mentioned facts.

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.

THE quarterly meeting of the Medico-Psychological Association was held on May 8th, at Bethlem Hospital, Dr. Rayner, President, in the chair. There was a very numerous attendance of members, and the provisions of the new Lunacy Bill were discussed at some length, a very strong expression of opinion being elicited that the intervention of the magisterial authority (as provided in Clause 2) prior to the granting of an order for the treatment of a person of unsound mind, was undesirable, and would lead, if adopted, to delay in treatment, to attempts at evasion of the law, and other untoward results. It was, however, considered difficult to suggest any officials for carrying out the proposed provision other than those indicated in the Bill, but it was urged that the power of those authorities should be purely "ministerial," and that when any doubt arose on medical questions they should only have power to direct a further medical examination. It was reported that these and other points, including the desirability of protection to medical persons signing certificates of insanity, and more extensive provision for secrecy in examination, had been already brought under the notice of the Lord Chancellor by a deputation to his office. A committee was appointed to draw up a suitable resolution to be presented to the annual meeting, in the event of Lord Shaftesbury's resignation of the chairmanship of the Lunacy Commission being confirmed.

HOSPITAL SATURDAY IN BIRMINGHAM.

THE amount contributed to this fund up to the time of going to press was £5860 8*s.* 0*d.*, as against the total of £5410 5*s.* 7*d.* last year. It is expected that when the lists are complete, over £6000 will be realised, the largest amount since the institution of the movement, over thirteen years ago. No less than £489 2*s.* 2*d.* has been contributed by the operatives in three firms, whose names deserve special mention:—Kynoch's, £245 5*s.* 6*d.*; Nettlefold's, £139 2*s.* 8*d.*; Tangye's, £104 14*s.* The employées in the first (cartridge works) are chiefly females, while the third amount only partially represents what Tangye's engineering works have done for their local charities. They have additionally expended £124 16*s.* in the purchase of hospital tickets.

SYPHILIS IN RUSSIA.

HERZENSTEIN has brought out the first part of his work on Medical Geography and Statistics in Russia. This deals with Syphilis. He complains that many of the official statistical records are evidently of little value for scientific purposes; for example, the cases of syphilis in the Wilna government in 1877 were returned as 211 in hospital and 29 in private practice. In 1878 not a single syphilitic recruit was found in Livonia; and in the two years 1879 and 1880, of sixty-three recruits, only one was reported as syphilitic. In 1871, 275,761 working men were examined, and only 194 were found affected—numbers which are all of them obviously too low. He has made use of the best sources of information open to him, and has come to the conclusion that 2,000,000, or 2 per cent., of the inhabitants of Russia are syphilitic, and that of the 13,000,000 families it contains some 700,000 are tainted. The way in which the disease is spread is by peasants, who, leaving the country for the large towns in order either to work in factories or for military service, contract the disease, carrying it back to their villages when they return—whole families thus becoming affected.

NEGLECTED NUISANCES AND TYPHOID.

IF any point in the history of typhoid fever may be held to be established, it is the constant and essential relation which exists between that disease and the presence of sewage impurities. We cannot therefore but strongly condemn the blind neglect of cleanliness in a case which affords us the latest recorded illustration of this truth. The circumstances were the following: An inspector of nuisances at Darlaston was required by the Local Board of Health, at the instance of the medical officer of the Board, to clear away an accumulation of sewage matter at the back of a house in which there were four cases of typhoid fever. The medical officer and the Board in so doing were of course only taking the first essential step in the treatment of disease, the removal of its cause. The inspector, however, had other views. He saw no need for interference, and left matters as they were. Under such conditions no remedies could be expected to effect their purpose, and we are not surprised to learn that out of four persons attacked by the disease three died, an unusually high mortality for enteric fever. It must be evident to all that the censure which this official justly incurred at the hands of his employers is but a light one, unless it implies an assurance that like offences will be prevented in the future.

THE EDINBURGH GRADUATES' CLUB.

THE members of this Club assembled in great force on Wednesday evening at the Holborn Restaurant, under the genial presidency of the distinguished Rector, Sir Stafford Northcote. There were nearly one hundred members present. The Rector was supported on the right by Field Marshall Lord Strathnairn, and on the left by the new Principal of the University, Sir William Muir. There were also present the Lord Provost of Edinburgh, Sir Charles Nicholson, Professor Geikie, Professor Mackie, Dr. Haldane, and Professor Flower.

THE PNEUMONIA COCCUS.

L. BRIEGER has examined the coccus described by Friedländer as the excitant of the croupous form of pneumonia. It was cultivated with success in solutions of grape and cane sugar neutralised with lime, and containing fibrin and nutrient salts. The cultures, even after two months, when injected into the breasts of mice and guinea-pigs produced distinct pleuritic symptoms. The guinea-pigs resisted the effects strongly, few of them dying; their exudations contained cocci and minute rods in their characteristic capsules. There is nothing in the chemical constitution of the cocci to account for their virulent character. The author tried to produce ptomaines from pure cultures, but without success.

SOAP IN BLOOD.

F. HOPPE-SEYLER, in the *Zeit. Physiol. Chem.*, states that a soda soap exists in the serum of blood and of chyle, and that it may be obtained by precipitation with alcohol and subsequent evaporation at a low temperature. Blood serum of the ox, horse, and dog contains 0·05 to 0·12 per cent. of the fatty acids of soap; human chyle 0·23 per cent. of soap and 0·723 of fat. Blood serum in a case of pneumonia contained 0·662 fatty acids of soap. The origin of soap in these fluids has not as yet been accounted for.

NITRITE OF AMYL IN SOUTH-AMERICAN INTERMITTENT FEVERS.

IN a paper on nitrite of amyl in *El Ensayo Médico* of Caracas, Don José Gomez Rosende says that in intermittent fevers, if administered in the first stage, it certainly stops the cold stage, and that when the hot stage comes on, followed by sweating, it brings the pyrexia to an end. It is, however, by no means to be looked upon as a specific or as a substitute for quinine, though it has the power of controlling the most distressing symptoms of these fevers.

THE TEETH IN MORPHIOMANIA.

As the result of a careful investigation, M. Combes has arrived at the conclusion that the chronic ingestion of morphia leads to rapid decay of the teeth. The disease appears first in the enamel of the teeth, and the large molars are the first to be affected; the small molars are next diseased; then the incisors suffer, and last of all the canines. As the enamel is insensitive, and as there is no periostitis, the disease makes rapid progress without causing much pain. The effect of morphia on the sensory nerves should also be borne in mind. The hair falls off at the same time that the teeth decay in morphiomaniacs.

THE SANITARY CONFERENCE.

FRANCE will be represented at the International Sanitary Conference at Rome by Drs. Brouardel, Proust, and Rochard; and Abbate Pasha, an Italian physician on the Khedive's staff, has been selected to represent the Egyptian Government.

SIR WILLIAM JENNER.

WE are happy to announce that Sir William Jenner has quite recovered from his attack, and has gone to the seaside for a fortnight.

DESPATCHES from Sawakin announce that at the H Redoubt there are now in hospital 169 non-commissioned officers and men. The total number of deaths have been 13. Up to the 6th inst. there had been 83 cases of dysentery and 27 of enteric fever admitted. At the auxiliary hospital on Quarantine Island Surgeon Major Corry had on the 6th inst. 97 non-commissioned officers and men, 18 of whom were suffering from dysentery and diarrhœa and 12 from fevers. The hospital consists of four well-ventilated wooden huts with a capacity for 100 beds.

DR. G. H. R. DABBS, medical officer of health for Shanklin, Isle of Wight, has, in his report for 1884, expressed his willingness to advise, unofficially, local builders on any points connected with sanitary arrangements of new houses or the alterations of existing systems. Dr. Dabbs' example in this respect might, we think, be usefully followed in other districts.

THE Royal Academy of Medicine of Rome has addressed a letter of thanks to Prince Alexander Torlonia for his munificent present to the city of a surgical amphitheatre and thirty beds, completely equipped. Professor Mazzoni, lately deceased, was the Prince's adviser in the erection of the institution, which is specially devoted to major surgery.

THE International Board of Health in Constantinople has, with a view to obviate the dangers of infectious disease in case of the outbreak of war, telegraphed to Dr. Jablonowski, who has been commissioned to study the plague on the Persian frontier, to remain there, and if necessary to take the requisite sanitary measures.

SKATOLECARBOXYLIC ACID is said by E. Salkowski, in the *Zeit. Physiol. Chem.*, to form a regular constituent of urine in cases of peritonitis and inflammation of the ileum, and that when present it can be detected with great ease.

THE congress of the French Association for the Advancement of Science will this year be held at Grenoble, the opening of which will take place on the 13th of August next, under the presidency of Professor Verneuil.

DR. SACHARJIN, Professor in the Therapeutical Clinic at Moscow, has given 1200 roubles out of the yearly proceeds of his post to the administrative authority of the university, to be applied to the assistance of poor students.

DR. LEGOUEST, Inspector-General of Military Hospitals, has been placed on the retired list, and is succeeded by Dr. Didiot, Inspector-General attached to the Medical Department of the offices of the Minister of War.

PROFESSOR HYRTL, who from 1847 to 1874 occupied the chair of Anatomy at the University of Vienna, celebrated on March 24th the fiftieth anniversary of his graduation as Doctor of Medicine.

THE Rajah of Sarawak has appointed C. G. R. Storie, M.B., C.M., to be Principal Medical Officer to the Sarawak Government, in place of Dr. E. P. Houghton, retired.

THE Prince of Wales has been pleased to appoint John Lowe, M.D., late of King's Lynn, to be an Honorary Physician to His Royal Highness.

DR. MÜNCH, Professor of Pathological Anatomy in Kieff, has gone to Tashkent, Khiva, and Kokhand for the purpose of studying leprosy.

CHOLERA is stated to have broken out in Rangoon, and the daily return shows an increasing number of deaths.

DR. BURNEY YEO has been appointed Professor of Clinical Therapeutics in King's College, London.

THE eleventh congress of the Italian Medical Association is to be held in Perugia next November.

CHOLERA CONFERENCE AT BERLIN.

IT will be remembered that in July last a conference on cholera was held at Berlin, under the presidency of Professor Virchow, which was opened by an address by Dr. Koch upon his researches in India and Egypt, and was occupied with the discussion of most of the important questions concerning the origin and dissemination of the disease. At the close of the session it was resolved to assemble again in the present year, and last week the meetings were held.[1] In addition to those who took part in the previous conference there were present Herr Koehler, the Director of the Imperial Board of Health, Dr. v. Pettenkofer of Munich, and Dr. Günther of Dresden. The proceedings opened on the 4th inst., the first point for discussion being the experience obtained since the last session upon the cholera bacteria, with especial reference to their durability.

PROFESSOR KOCH, who opened the discussion, referred at first to the accounts published since the last conference. He criticised the statements of Finkler and Prior, Klein and Emmerich, and reaffirmed the fact that the comma bacillus was peculiar to cholera, and was never absent from it. As confirmatory of this, he described the results of his examinations of cover-glass preparations of choleraic intestinal contents sent to him from Calcutta, and showed that the cultures of the comma bacillus obtained from France, Italy, and Germany were absolutely identical. He considered it proved that the comma bacillus occurs exclusively in cholera, that it is readily distinguished from other bacteria, and therefore of diagnostic value. He has performed a large number of experiments upon guinea-pigs, which were given five cubic centimetres of a 5 per cent. soda solution, followed in twenty minutes by an injection into the stomach of ten cubic centimetres of broth containing comma bacilli; laudanum was injected into the abdominal cavity immediately afterwards; the animals remained narcotised for about an hour, and then completely recovered. On the following day they appeared ill, their coats became rough, they became very feeble, and died in from one to three days. The small intestine was found to be swollen, and, together with the stomach and cæcum, was filled with an alkaline, colourless, flaky fluid, which contained a pure culture of comma bacilli. The use of the soda solution and opium had been found to render the animals more susceptible to the pathogenic action of bacteria generally; and the same experiments, although in smaller degrees, succeeded with Finkler's and Denecke's bacillus. But in these latter experiments other phenomena were present—e.g., the Finkler bacillus caused putrefaction, as the odour of the intestinal contents proved. It was found that the administration of large doses of calomel or the use of naphthaline prolonged the life of the inoculated animal for about a day. The comma bacillus is readily destroyed by drying, and by certain disinfectant agents—e.g., carbolic acid in a half per cent. solution. That the human being could be infected was proved by one of the 150 medical men who attended the course at the Hygienic Institute becoming attacked with cholerine. Comma bacilli were found in the dejecta from this case, and pure cultivations were made. Experiments were also made to determine the durability of the comma bacillus in various media; this was found to be thirty days in spring water, seven days in drain water, twenty-four hours in sewer contents, three to four days on damp linen, eighty-one days in the harbour water of Marseilles (Nicati and Rietsch), and 144 days on agar-agar. A permanent form resembling the spores of other bacteria could not be ascertained.

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[1] See Deutsche Med. Wochenschrift, May 7th, 1885, and Berliner Klinische Wochenschrift, May 11th, 1885.

Professor von Pettenkofer said that he was not convinced; the experiments on animals were very insufficient, and better results had been obtained by Emmerich, who had brought cultures of bacilli to Munich from Naples. The mode of inoculation upon guinea-pigs practised by Koch did not explain how human beings were infected by cholera. He was unable to regard the comma bacillus as the causal agent of cholera, but considered it far more probable that certain conditions were induced by cholera favourable to the development of the comma bacillus. It was a straining of epidemiological experience to regard the comma bacillus as the cause of cholera; for whereas the bacillus is destroyed by dryness, the dry season in Lower Bengal favours cholera. Then the comma bacilli were present only in the intestine, and not in the organs; and it had to be supposed that they caused the production of a powerful poison in the cholera intestine, which has so little power of absorption. Such, however, could not be proved in the experiments conducted at Munich. Cholera does not seem to be a combination of infection and intoxication, but a purely infective disease. The future must decide whether Emmerich's rods are the actual excitants; they are found in organs, as cultivations proved, although not detectible in microscopical sections. Animals infected with them died with vomiting and diarrhœa, as in cholera. But whatever the verdict as to the bacilli, there must first be established a conformity with epidemiological facts. If cholera patients are not directly infected, then the cholera fungus can have no share in inducing the disease; and if cholera is dependent upon conditions of locality and season, then also a cholera fungus cannot determine it.

Dr. B. Fünkel mentioned that the only bacterium of the intestine which had a morphological similarity to the comma bacillus was a comma-shaped vibrio occurring in the mouth. Like many others, he had attempted to cultivate this organism, which Dr. Koch had shown at the second sitting of the previous conference, and he could positively affirm that it does not grow in gelatine media.

Professor Koch, replying to Professor Pettenkofer's arguments, pointed out that the methods employed by Emmerich were open to objection and to error. There was no analogous instance whatever of a bacillus being secondary to a disease with which it was solely associated. The dry season in Calcutta does not make the town dry, but diminishes the rich water-supply of the place. Opposed to the failures at Munich to obtain a poison from pure cultures of the comma bacillus were experiments (not yet concluded) which he was making, giving positive results. Cholera was never, like anthrax and small-pox, disseminated by dry conditions, and experience was opposed to there being a permanent state of the bacillus.

The debate was resumed on the following day (May 5th) by Professor von Pettenkofer, who pointed out that many facts were unexplained by the doctrine that the comma bacillus or Emmerich's bacillus was the cause of cholera—e.g., the latency of an epidemic during winter, its recurrence and its acknowledged dependence on time and place. He compared cholera to malaria, which, although communicable by inoculation, still depends upon conditions of soil. A distinction should be made between artificial and natural infection, for it cannot be thought that an epidemic occurs in the same manner as experimental infection.

Professor Virchow said that experiments upon animals were not absolutely necessary. The animals infected by Emmerich's fungus showed phenomena which were readily mistaken for those of cholera, but many substances could excite similar symptoms. Thus, in 1847 he had produced choleriform symptoms and lesions in dogs by the injection of putrid material into the blood; and he was therefore led to compare cholera with putrid infection, not however considering them to be identical. In Koch's experiments the opium may have prevented diarrhœa and vomiting, and therefore the experiments were in a sense defective, and would have to be repeated. Emmerich, by cultivating his bacilli in blood from a living vein may have obtained an accidental form. The constant occurrence of Koch's bacillus in the intestine, the special seat of cholera, was in favour of his view. The gastric secretion is not invariably acid, and therefore dyspeptic conditions might render a previous preparation of the animals superfluous. In these diseases—as muscardine or the potato disease, the fungoid nature of which had long been known—it was still a question why an epidemic arises and why it disappears. In spite of the knowledge gained respecting morbific fungi, but little progress had been made in explaining the cause of epidemics. Although the comma bacillus had no permanent form, yet it had a certain duration of life, for Dr. Babes had found cultures to retain their viability at the end of six months, and had procured a specially large form of vegetation composed of broad, longitudinally striated spirilla that was very durable; it was produced by exposure to low temperatures, but could readily develop into short comma-shaped forms. But the form of the bacillus varies with varying external conditions. The vesicular forms of Ferran, described as evolved from the spirilla, are degenerate and sterile. The prolongation of epidemics from year to year is sufficiently explained by the duration of life of the bacillus; and in other directions the discovery of this organism was a positive gain to knowledge. It was not opposed to former experience, especially that derived from the meritorious labours of von Pettenkofer; but too profound a penetration into theoretical speculations must be avoided.

Professor Hirsch remarked that epidemiological inquiry was at least of as much importance as bacteriology in reference to the course of epidemics and to prophylaxis.

Drs. Koch, Pistor, von Pettenkofer, and Virchow made some further observations on the point; and the Conference next discussed the question of the spread of cholera by human intercourse, pilgrimages, and by ships. This was opened by Professor Koch, who instanced the spread of cholera in India by pilgrimages, gave examples of ship epidemics of long duration, and showed how unreliable were the accounts given by sailors.

Professor von Pettenkofer assigned little importance to pilgrimages and railway intercourse, and urged caution in accepting statements of the transmission of cholera by travellers. At this point the debate was adjourned, a demonstration being given of guinea-pigs (living and dead) infected with comma bacilli.

At the third sitting on May 6th, the debate on the second point was resumed, together with that on the third—viz., the influence of soil, air, and water.

Dr. GÜNTHER of Dresden adduced evidence from Saxony to show that human intercourse does not suffice to disseminate cholera at all times and under all circumstances, but that a seasonal and local disposition is necessary for the occurrence of an epidemic.

Professor HIRSCH remarked that human intercourse did not invariably determine the spread of cholera, but that cholera is always spread through human intercourse.

Professor KOCH, alluding to the demonstration of the previous day, said that of fourteen guinea-pigs inoculated on the 4th inst. only two had survived, and suggested that, as with other plants, the cholera fungus may find temporarily conditions favourable to its existence, afterwards perishing for lack of these conditions. He cited instances in proof of an acquired immunity against cholera, and of its spread by pilgrims, travellers, and troops. Proof of such dissemination could not be expected in all instances, but we must be content to establish it indubitably in certain cases. The fact was of the highest importance in view of the prophylactic measures to be taken by authorities. The long duration of cholera on shipboard could not be explained by regarding the soil as the sole condition of its origin, but could be accounted for on the view of transmission from man to man, for the incubation period of cholera is very short.

Dr. GÜNTHER said that the incubation period usually lasted for four days, but he knew of cases where it was from ten to seventeen days.

Dr. MEHLHAUSEN cited instances of the spread of cholera by troops, and Drs. EULENBERG and HIRSCH gave similar examples of its spread by rafts.

Professor von PETTENKOFER did not deny the fact of an acquired personal immunity after an attack, but asserted that it was the local immunity which determined the occurrence of an epidemic. The disposition of a locality for epidemics consists in part of local constant conditions, in part of local transitory (seasonal) factors. He by no means denied the influence of human intercourse in the spread of cholera; but this alone does not suffice to evoke an epidemic. Local and seasonal influences must determine this. He did not know how the infective germ gets on board ship; but the mere shipment of a patient is not sufficient to cause the disease to spread.

Professor VIRCHOW said that the supporters of the contagionist doctrine did not admit that direct transference from man to man must of necessity occur; that is proved by infection through cholera linen, still more by the pure cultures, in which the development and sustenance of cholera germs take place outside the human body. But just as certainly did these cultures show that it is not in the earth where these germs are able to thrive. Up to the present not a single case was known where the existence of cholera germs in the soil had been proved. He would not deny the possibility, but he disputed the exclusiveness of the soil theory. Experiment and observation of separate cases yield more certain conclusions than whole epidemics, which were only considered on a large scale. He had personal knowledge of the transference of cholera from man to man in 1871, and had published a conclusive observation in his collected works. In a prison, which at the time was free from cholera, three men were attacked who had charge of a case of cholera which had been admitted. Cholera was transmitted on board ship which had nothing to do with the soil—e.g., the Stetten Transatlantic steamer *Franklin*. Although no doubt can exist that the spread of cholera is not dependent on a poison or germs arising from the soil, still, what is as yet known of the history of the comma bacillus does not exclude the possibility of its developing and thriving in the soil under certain conditions. He, therefore, saw no difficulty in agreeing with Professor von Pettenkofer provided that he abandoned his exclusive standpoint.

Professor von PETTENKOFER said that originally he accepted contagion as the chief factor, but observation of the varying behaviour of cholera, according to locality and period, obliged him to lay especial stress on the chronological and local factors.

Dr. MEHLHAUSEN related an undoubted instance of communicability of cholera from person to person observed in Thorn in 1873.

(*To be continued.*)

THE ANCIENT AND MODERN METHODS OF TREATING EPIDEMICS OF SMALL-POX IN INDIA.

SURGEON-MAJOR ROBERT PRINGLE, M.D., read a paper on the above subject at the rooms of the Society of Arts on May 8th. He drew attention to the ancient method of treating epidemics of small-pox in India, which was that of inoculation, while the modern, as was to be expected, was Jenner's great discovery of vaccination. The details given by Dr. Pringle of the practice of inoculation in India were the result of continuous personal observation during the past twenty years, in the independent native State of Tirri Ghurwâl, in the Himalayas. Here it would appear that inoculation had been practised from, what might be termed, time immemorial. After giving the details of the operation, Dr. Pringle entered into full particulars of the benefits of this practice. These he described as visible benefits, and compared them with the effects of spontaneous small-pox in the plains at the foot of the Himalayas, where no inoculation was practised, and before vaccination could have made any impression on the adult population. In accounting for the remarkable difference between the visible effects of spontaneous small-pox, as met with in the plains of Hindoostan, and those seen in the cases of inoculated small-pox in the Himalayas, Dr. Pringle remarked that, in his opinion, it would seem to be due, on the part of the inoculators, to what he termed accidental cultivation of the product of the spontaneous small-pox eruption, to a considerable extent on the lines of M. Pasteur's recent discoveries. The process of this accidental small-pox cultivation consisted in the lymph being carried on through many transmissions till the cultivated product resembled in its action cow-pox lymph, and only produced local symptoms at the point of insertion, or else, so rarely a small-pox eruption, as to make its appearance quite exceptional—thus corresponding in a remarkable manner with the common and destructive outbreaks of sheep-pox and the rare and mild cases of cow-pox. In 1864 Dr. Pringle inaugurated the present system of voluntary vaccination in the Mesopotamia of the Ganges and Jumna, from fifty miles above their junction at Allahabad to their sources in the Himalayas. In alluding to this modern prophylactic for small-pox, he confined his remarks to the points in which the practice of vaccination differs in India from that carried on in this country. These he summed up under the head of climatic causes, which, owing to the high temperature met with in the plains of Hindoostan from April to October, limited the practice of vaccination to the cold weather months—viz., from the middle of October to the middle of March. Thus, out of the twelve months, there were only five in which vaccination could be practised; and this led him to describe the means he adopted to keep up the supply of vaccine lymph in the Himalayas, in what he termed "lymph nurseries." Latterly, by retrovaccinating—i.e., vaccinating a calf and taking the lymph from the eruption—Dr. Pringle has succeeded in making his sanitary circle, with its population of ten millions, and other circles of similar extent, independent of any supplies from the National Vaccine Establishment. In comparing the two prophylactic measures, Dr. Pringle pointed out that, while the practice of inoculation no doubt kept up the disease of small-pox, and was dependent on its presence for the virus required for the operation, yet, even imperfectly as it was carried on, it was nevertheless a very great boon to the population, as it could be practised throughout the year. In the practice of inoculation, he said, the repetition of the operation at any future period of life was never thought of, and in this, according to the generally, and indeed latest, received view of vaccination, it was, in his opinion, far superior to vaccination in countries like India. As regards revaccination, Dr. Pringle said had he considered revaccination necessary, he would never have spent twenty years of his life in a continuous effort to supplant inoculation without a repetition of the operation, with vaccination *plus* revaccination after a given number of years. In India at least, and most certainly not in his circle, with its ten millions, where, with two hundred operators working at nothing else but vaccination for five months, he could not reach half the annual birth-rate. He therefore discouraged revaccination in his circle, and made quality the basis of his work and not *quantity*, explaining to his subordinates that if the former imparted the immunity claimed for it this result would quickly be followed by the latter. In concluding, Dr. Pringle illustrated the absolute necessity of carefully supervising any system of vaccination, both as regards the veracity of the returns submitted and the quality of the work, with reference to the knowledge and skill of the operators. In 1863 the vaccination in the second circle in the North-West Provinces was held up as a pattern to India, and yet within twenty years this system in the circle is stigmatised in a public document as a "wholesale fabrication of returns," while that in the first circle in the same report was stated to be such that the magistrate of a large district placed the following on record:—"I regret to record my conviction that these numbers are a wholesale imposition." Yet in twenty years Dr. Pringle's vaccination in this first circle, on the principle of quality, not quantity, was such that it was publicly commended by the Government in 1883, and a Mahomedan gentleman of influence, as the result of the benefits exhibited by this mode of work in his own district, with a population of over one million, brought into and carried through the Council of the Viceroy a Bill for compulsory vaccination in certain localities and under certain conditions. Dr. Pringle from the preceding aimed at showing that the cause of the failure of a system of vaccination, if carefully and fearlessly inquired into, will be found to lie, not in any imaginary deterioration in the vaccine virus, when proper care is taken, nor yet in a diminution in the protective power of really good vaccination by the lapse of years, or in the neglect of revaccination; but to what the Government of the North-West Provinces recorded in 1883, in the case of the second sanitary circle, as *the inexcusable negligence of the supervising officials*, and in many other cases no doubt to the ignorance of the operators and the employment of stored lymph (for which no one seems to be directly responsible), imparting a false protection, the result of a spurious vaccination.

THE INTERNATIONAL SANITARY CONFERENCE.

The Roman papers announce that the Italian Government abstained from drawing up a formal programme for the Sanitary Conference which assembles in Rome to-day (15th inst.), acting on the precedent of the Constantinople Conference, which entrusted a committee selected from among its own members with the task of framing the programme of its labours. However, Signor Mancini, Minister of Foreign Affairs, in a recent circular to the Powers to be represented at the Conference, formulated a summary of the intentions of the Italian Government as to the Conference in question. According to this circular, the Conference is designed to have a twofold purpose—the one technico-scientific, the other diplomatico-administrative. The Roman Conference would be able to examine the findings of the preceding sanitary conferences, notably that of Vienna, in order to see what conclusions are worth maintaining, what are to be modified, what to be suppressed. As for the diplomatico-administrative part, the Conference, examining the question of the preventive measures which may be adopted with due regard to the interests of commerce, and to the freedom of inter-communication, would have to fix the basis of an international accord, which should be acceptable to all the Governments, for extinguishing contagious diseases, while laying down rules, based on uniform principles, as well for quarantine as for any other system of protection. It is understood, however, that the treatment of the negotiations already in progress as to the composition and attributes of the Sanitary Council in Egypt must be reserved and kept separate, the Conference having it in its power to avail itself at an opportune time of the conclusions of that particular transaction. Finally, the Conference might be able to define practical rules for the immediate application of the international system of sanitary directions counselled by the Washington Conference, as well as the mode of establishing in convenient localities an official agency for arriving at accurate sanitary information, and transmitting the same to the Governments forming part of an International Sanitary Union to be constituted according to the attributes and criteria which the Conference should determine. This, however, would have absolute freedom of initiation and of deliberation—in other words, complete liberty of action.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Leicester (Urban).—Dr. Johnson's report upon the health of this borough during 1884 is largely devoted to the consideration of the waste of infant life, which has so long been the prevailing feature of the vital statistics of this town, and which showed an exceptional excess last year. With regard to the present population of the borough, the medical officer is of opinion that the Registrar-General's estimate, based upon the hypothesis that the rate of increase since 1881 has been the same as that which prevailed during the last intercensal period, 1871-81, considerably exceeds the true number. It is pointed out, in support of this opinion, that the births recorded in recent years have shown no increase; indeed, the number in 1884 was somewhat below that in 1880. Dr. Ogle, of the Registrar-General's office, also showed, in a letter which Dr. Johnson prints in his report, that if the rate of increase of population in Leicester since 1881 has been the same as that of inhabited houses on the rate-book, the population in the middle of 1884 was 127,929, and nearly 5000 less than the estimate by the Registrar-General's usual method. Dr. Johnson, in his report, has adopted this lower estimate, which makes the death-rate in the borough last year 22·9, instead of 22·1 as reported by the Registrar-General. This rate shows an increase of 3·7 upon the low rate in 1883, but was slightly below the mean rate in the eight years 1875-82. It may be noted, however, that, while adopting a revised population for 1884, Dr. Johnson has not corrected his rates for recent years, and that the rates given for the five years 1875-79 in Tables I. and IV. differ widely. The death-rate in Leicester last year from the principal zymotic diseases was, according to the Registrar-General, 4·03 per 1000; but it is worthy of note that the mortality from each of these diseases was below the average rate in the twenty-eight towns, except that from diarrhœa, which was more than double the average rate. Dr. Johnson attributes the startling mortality from summer diarrhœa in Leicester to "introduction into the system, by means of air or in food, of living organic ferments derived from the putrefactive decomposition of animal refuse matter retained in many of the town sewers, and present also through soakage in the adjacent subsoil." Infant mortality in Leicester last year, measured by the number of deaths under one year to births registered, was equal to 233 per 1000, against a mean of 168 in the twenty-eight towns. This excess was only in part explained by the marked diarrhœa mortality, as the deaths referred to atrophy, debility, premature birth, and convulsions also showed a marked excess. No health report of a large town or community is complete which does not show the death-rates of males and females at five or more groups of ages, calculated upon the numbers living at the same ages. This information is especially necessary in the case of Leicester, and would help to throw light upon the causes of the high rate of infant mortality from which the town has suffered for so many years. No such information is, however, given in the report before us. Scarlet fever has been more or less fatally prevalent in Leicester during the last five years, and 63 deaths resulted from this cause last year, of which 16 occurred in the Fever Hospital. Dr. Johnson points out that without more general and ready use of the fever hospital accommodation provided by the sanitary authority, success in "clearing the town from this lingering pestilence" is unattainable. Bearing in mind the unsatisfactory condition of the subsoil, and the suggested connexion between this defect and the excessive mortality from diarrhœa, the fact that upwards of 1200 houses in the town still derive their water-supply from surface wells suggests a source of grave danger to the health of the town.

Lincoln Urban District.—A somewhat exhaustive report has been submitted to the Corporation by Dr. C. Harrison, medical officer of health and public analyst, respecting the water-supply of the city. The report sums up in a very clear manner the considerations which should influence a body having charge of the public health, and who supply to the population a water-supply derived from such a source as the river Witham. Dr. Harrison explains that the water after filtration as now supplied contains an excess of organic matter, making it only a second-class water. The sources of the water are polluted by drainage from land highly cultivated and occasionally manured by nightsoil, and he asserts that water from such a source must be dangerous. There are filter beds capable of filtering more than a million gallons daily, but the conclusions arrived at are that the quantity available is not sufficient for the wants of the city, and that it is not advisable that the supply should be taken from the river. Putting aside the unfavourable chemical condition of the water, we certainly concur in Dr. Harrison's opinion that a river receiving drainage and effluent from a large town could not with any degree of safety be used for domestic purposes. Indeed, as he asserts, it is unwise and dangerous to take water from a source known to be polluted or liable to pollution, and then to trust to the purifying effects of filtration to render it safe for consumption.

Wolverhampton Urban District.—During 1884 small-pox became very prevalent in Wolverhampton, and it was found necessary to fit up a house known as Holly Hall as a temporary infectious hospital. Of a total of 37 vaccinated patients, 1 case terminated fatally; whereas of 6 unvaccinated, 4 died. Not a case was known to have occurred in any revaccinated person. The town also suffered severely from measles. So, also, 212 cases of scarlet fever were heard of, and Dr. Malet explains that the efforts to check the spread of this disease were most disheartening. It is a question, however, how far this may have been due to the circumstance that no proper means of isolation are provided for the borough, the sanitary authority still relying on the isolation wards of the General Infirmary for this purpose. Such an arrangement as this has nowhere been found to serve the purposes of a properly organised hospital with its accessories, established and maintained by the sanitary authority. Open middens and cesspits of the worst type still prevail in the borough; underground soft-water tanks, discharging their overflow without disconnexion into the drains, are almost universally resorted to; and in some parts the condition of houses, closets, and courts is such as to merit the term "beastly" in point of filth. A first step towards a remedy has, however, been taken in the investigation and exposure of this state of affairs, and it may be hoped that decided action will soon follow. The deaths included 5 from small-pox, 98 from measles, 37 from scarlet fever, 6 from diphtheria, 21 from non-spasmodic "croup," 12 from continued fever, and 140 from diarrhœa. The general death-rate was 22·2 per 1000.

Isle of Wight Rural District.—In submitting his first annual report on this district, Dr. Groves deals at some length in a description, topographical and geological, of the localities comprised within its area, and he then considers the character of the different water-supplies, especially from the geological point of view. Detailed observations of rainfall and temperature, together with an account of the climate of the island and of the features by which it is influenced, and other matters of extreme interest follow, before the usual sanitary report is commenced. The birth- and death-rates for 1884 were 27·5 and 13·6 per 1000 respectively, and the rate from the principal zymotic diseases was 1·2. Some voluntary notification of infectious diseases is made, and this has sufficed to show the great need of an isolation hospital for sanitary purposes. A cottage is suggested as sufficient to form a nucleus, but probably one of the special pavilions recently designed by the Local Government Board for small localities would better answer the purpose. Plans of these were recently submitted to the Epidemiological Society. The general sanitary circumstances of the rural district, as to water, closets, sewers, drains, piggeries, &c., are next entered into at some length, and it is evident that the island is by no means so free from real danger to health as its many visitors imagine. Rarely, we are told, are the most elementary precautions taken to protect the shallow wells; it is simply a matter of haphazard whether they become polluted or not. Polluted streams and brooks are also resorted to as water-supplies. When Dr. Ballard reported to the Local Government Board some years ago on the state of the island many grave sanitary defects were exposed, but we had hoped that they had before this been remedied. At that time the sanitary organisation was very defective, but it is now evident that, so far as the rural portion of the island is concerned, the authority does not lack a skilled and competent adviser, and we trust that his future reports will show that the sanitary defects he points out will have been removed.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5558 births and 3440 deaths were registered during the week ending the 9th inst. The annual death-rate in these towns, which had been equal to 23·4 and 21·1 per 1000 in the preceding two weeks, further declined last week to 20·2, and was lower than in any previous week of this year. During the first five weeks of the current quarter the death-rate in these towns averaged 22·6 per 1000, against 23·5, the mean rate in the corresponding periods of the nine years 1876–84. The lowest rates in these towns last week were 13·0 in Plymouth, 14·1 in Brighton, 15·2 in Bolton, and 15·3 in Hull. The rates in the other towns ranged upwards to 26·4 in Oldham, 26·4 in Blackburn, 28·6 in Preston, and 36·8 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 529 and 449 in the preceding two weeks, were 481 last week; they included 181 from measles, 116 from whooping-cough, 36 from scarlet fever, 37 from "fever," (principally enteric), 33 from diphtheria, 30 from diarrhœa, and 48 from small-pox. No death from any of these principal zymotic diseases was returned last week in Brighton, whereas they caused the highest death-rates in Sunderland, Blackburn, and Newcastle-upon-Tyne. The greatest mortality from measles was recorded in Sunderland, Cardiff, and Newcastle-upon-Tyne; whooping-cough in Preston, Plymouth, and Blackburn; scarlet fever in Sunderland and Salford; and "fever" in Norwich. The 33 deaths from diphtheria in the twenty-eight towns included 24 in London, 3 in Liverpool, and 2 in Oldham. Small-pox caused 71 deaths in London and in its outer ring of suburban districts, 2 in Manchester, 1 in Liverpool, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated on and around London, which had been 1034 and 1282 on the preceding two Saturdays, further rose to 1361 at the end of last week; the admissions, which had been 246 and 354 in the previous two weeks, were 315 last week. The Highgate Small-pox Hospital contained 81 patients on Saturday last, 14 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding four weeks from 512 to 337, further fell last week to 287, and were 75 below the corrected weekly average. The causes of 73, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Leicester, Newcastle-upon-Tyne, and in eleven other smaller towns. The largest proportions of uncertified deaths occurred in Liverpool, Salford, Oldham, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding five weeks from 25·0 to 22·4 per 1000, further fell to 20·6 in the week ending May 9th, and was but 0·4 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 12·9 and 15·7 in Leith and Dundee, to 23·7 in Paisley and 24·3 in Glasgow. The 504 deaths in the eight towns included 25 which were referred to whooping-cough, 13 to measles, 6 to diarrhœa, 5 to diphtheria, 3 to scarlet fever, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all, 55 deaths resulted from these principal zymotic diseases, against 81 and 64 in the preceding two weeks. These 55 deaths were equal to an annual rate of 2·3 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough, which had been 30 and 27 in the previous two weeks, further declined to 25 last week, and included 12 in Glasgow and 6 in Edinburgh. The 13 fatal cases of measles also showed a further decline from recent weekly numbers; 11 occurred in Glasgow and 2 in Greenock. Five of the 6 deaths from diarrhœa, 3 of the 5 from diphtheria, and 2 of the 3 from scarlet fever were returned in Glasgow. The 3 deaths referred to "fever" were fewer than in any recent week; 2 occurred in Paisley and 1 in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 131, 118, and 124 in the preceding three weeks, declined to 117 last week, and were 5 below the number returned in the corresponding week of last year. The causes of 79, or 15 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 34·0 and 33·5 per 1000 in the preceding two weeks, further declined to 28·5 in the week ending the 9th inst. During the first five weeks of the current quarter the death-rate in the city averaged 32·4 per 1000, the mean rate during the same period not exceeding 21·3 in London and 18·7 in Edinburgh. The 193 deaths in Dublin last week showed a further decline of 34 from the high numbers in the previous two weeks; they included 12 which were referred to measles, 4 to whooping-cough, 2 to "fever" (typhus, enteric, or simple), 2 to diarrhœa, 1 to scarlet fever, 1 to "fever," and not one to small-pox. These 22 deaths from the principal zymotic diseases showed a decline of 18 from the number in the previous week, and were equal to an annual rate of 3·3 per 1000, the rate from the same diseases last week being 3·1 in London and 1·5 in Edinburgh. The fatal cases of scarlet fever in Dublin, which had been 15 and 17 in the previous two weeks, declined to 12 last week The deaths from scarlet fever, "fever," and diarrhœa also showed a considerable decline. Five inquest cases and 5 deaths from violence were registered last week, and 63, or nearly a third of the deaths, were recorded in public institutions. The deaths of infants showed a marked decline. The causes of 43, or more than 22 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Deputy Surgeon-General George Stewart Watson Ogg, of the Madras Medical Department, principal medical officer of the Hyderabad Subsidiary Force, has been selected for the chief medical charge of the Quetta Field Force.

INDIA OFFICE.—The Queen has approved of the following promotions among the officers of the Staff Corps and Indian Military Forces made by the Government in India:—Deputy Surgeon-General Benjamin Simpson, M.D., of the Bengal Medical Establishment, Deputy Surgeon-General Michael Cudmore Furnell, M.D., of the Madras Medical Establishment, and Deputy Surgeon-General William James Moore, C.I.E., of the Bombay Medical Establishment, to be Surgeons-General. Brigade Surgeon John Brake, of the Bengal Medical Establishment, and Brigade Surgeon John McNeale Donnelly, M.D., of the Madras Medical Establishment, to be Deputy Surgeons-General. Surgeon-Major George Sackville Sutherland, M.D., and Surgeon-Major Emanuel Bonavia, M.D., of the Bengal Medical Establishment, Surgeon-Major William Frederick De Fabeck, M.D., of the Madras Medical Establishment, and Surgeon-Major Edward Harley Raynsford Langley, of the Bombay Medical Establishment, to be Brigade Surgeons.

ADMIRALTY.—The *following appointments have been* made:—Fleet Surgeon John Thomson Comerford, to the *President*, additional; *Fleet Surgeon John S. Dobbyn, M.D.*, to the *Repulse;* Fleet Surgeon James W. Fisher, M.D., to the *Hercules;* Staff Surgeon Solomon Kellett, to the *Rupert;* Surgeon George W. Low, to the *Ganges;* Surgeon Thomas R. Pickthorne, to the *Excellent; and Surgeon James C. Dow, to the Pembroke.*

ARTILLERY VOLUNTEERS.—*1st Renfrew and Dumbarton:* Surgeon William Aitchison Wilson, M.D., is granted the honorary rank of Surgeon-Major; Acting Surgeon James Finlay, M.D., resigns his appointment; William Robert Sewell, *Gent. M.D., to be Acting Surgeon.—1st East Riding* of Yorkshire: Major William Henry Marwood resigns his commission; also is permitted to retain his rank, and to continue to wear the uniform of the Corps on his retirement; Thomas Tinley, Gent., to be Acting Surgeon.—1st Argyll and Bute: David Macneilage, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd (the Buchan) Volunteer Battalion, the Gordon Highlanders: Acting Surgeon George Innes Fraser, M.D., resigns his appointment; Adam Blackhall, Gent., M.D., to be Acting Surgeon.—20th Lancashire (2nd Manchester): William Coates, Gent., to be Acting Surgeon.—1st Perthshire: William Haldane, Gent., M.D., to be *Acting Surgeon.—1st Bedfordshire:* Surgeon Charles Cyril Hicks, M.D., resigns his commission.—1st Cinque Ports: *Honorary Assistant-Surgeon Charles Harris, M.D.*, resigns his commission; also is permitted to retain his rank and to *continue to wear the uniform of the Corps* on his retirement.—1st Elgin: George Hugh Mackay, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the Royal Welsh Fusiliers: Arthur Llewelyn Evans, Gent., to be Acting Surgeon.—2nd Volunteer Battalion, the Loyal North Lancashire Regiment: Surgeon John Grindall Brayton resigns his com*mission.—5th (Deeside Highland) Volunteer Battalion,* the Gordon Higblanders: Acting Surgeon Hunter Urquhart Walker resigns his appointment.—7th Middlesex (London Scottish): George Ogilvie, Gent., M.B., to be Acting Surgeon.—2nd Volunteer Battalion, the East Yorkshire Regiment: Alexander Ferrier Angus Fairweather, Gent., M.A., M.D., *to be Acting Surgeon.*

Correspondence.

"Audi alteram partem."

THE TREATMENT OF SEPTICÆMIA BY IRON AND QUININE.

To the Editor of THE LANCET.

SIR,—In THE LANCET of Jan. 17th last there is the record of a case of septicæmia treated by ammonia and chlorate of potash. The following case I desire to place in contrast.

Mrs. H——, aged twenty-two, was confined on Oct. 15th, 1884, after a very protracted labour of two days' duration. It was her first child, and she was delivered with the forceps. All seemed to go on well until the third day, when the temperature was found to be rising. On the 19th high fever developed, and the discharges were very foul. My directions as regards thorough cleansing of the genitals and injections of Condy's fluid into the vagina (as is my practice after all cases of instrumental labour) had not been *carried out. There was, it should be observed,* a tear of the mucous membrane, about an inch in length, but not very deep, on the posterior wall of the vagina. The evening temperature was 104·8°. I injected Condy's fluid into the fundus, and gave a mixture of steel and quinine every two hours. On the 20th the morning temperature was 101·7°. The fluid was again injected into the fundus, and followed by the injection of carbolic oil (1 to 10). Linen cloths in small pieces, dipped into the oil, were applied to the tear in the vagina, and the external genitals washed thoroughly with carbolic soap by the nurse. I gave directions that the linen rags should be changed three times a day and that the soap should be used every eight hours. Injections were repeated in the evening. On the 21st the morning temperature was 101·9°; evening, 101·7°. The injections of Condy's fluid were continued, but the carbolic oil injection was not used any further. On the 22nd the temperature throughout the day was 100·5°; and the respiration 23. On the 23rd the temperature in the morning was 100·4° and the respiration 22. The medicine was now taken three times a day only. On the 24th the temperature had fallen to 100° in the evening, and the patient expressed a wish to get up, but was ordered to keep her bed for a day or two. On the 25th the temperature in the morning was 99·4°, and fell on the 26th to 98·4°. She was now allowed to get up and go downstairs.

In Mr. Coffin's case, although no doubt the infective material was of a much stronger nature than that developed in this, the recovery seems slow in comparison. The temperature, he states, for six days and a half was over 105°, for nine days over 103°, and for eleven days over 102°. My *patient was cured in seven days,* and my sole object in recording the case is to speak of my theory of the nature of such cases, and the consequent indications as regards treatment, the more especially as Mr. Coffin speaks with considerable reserve in reference to his case.

As regards local treatment, my practice is to purify with Condy's fluid the whole genital tract, and then to inject carbolic oil of the strength of 1 to 10 into the fundus, afterwards applying the same, or else vaseline and iodoform, to any tears in the mucous membrane. The oil I employ as an injection once or twice only, keeping afterwards solely to Condy's fluid in warm water twice a day until the temperature becomes normal, or nearly so. As to constitutional remedies, I consider the arrest of all such septic processes in the blood to be perfectly feasible. Avoiding ammonia, which is a powerful agent for the prevention of the formation of fibrin, and is thus useful (as has been clearly proved) when given to the blood-giver in cases of transfusion, I prescribe astringents and hæmatinics, such as iron and hydrochloric acid, along with germicides, such as quinine and chlorate of potash.

I argue that in puerperal septicæmia we have a disease in which every effort of nature for the prevention of absorption of infective material should be fostered and encouraged. The clots in the maternal sinuses formed on the separation of the placenta may be regarded as the natural barrier to any external morbific influence. The preservation, therefore, of their integrity until they become organised and contracted should be of paramount importance. Hence the advisability of avoiding agents which tend to soften and disperse fibrinous deposits and formations of this nature. Should infection by septic materials have occurred, the efforts of the physician should be directed to strengthen the fortifications raised by natural means, and this can only be effected by astringent and hæmatinic remedies, such as steel and hydrochloric acid, with the assistance of quinine and chlorate of potash, for the destruction of the germs which have found entrance to the circulation by means of the lymphatics. To give "liquefacient" remedies, such as ammonia, sodic salicylate, or potassic iodide, is, I think, simply to break down the natural barrier described, and to further absorption of septic materials by a diffused and weakened circulation—weakened by reason of its deficient fibrin-forming power. Infection of the blood, indeed, is thus doubly ensured by medicinal liquefaction and septic softening of clots, for wherever there is the development of sulphuretted hydrogen by decomposition of animal matter no fibrin can exist. I prescribe five-minim doses of the perchloride of iron, one-grain or two-grain doses of quinine, and five-grain doses of chlorate of potash, with glycerine in half-drachm doses, every two hours, until there is a considerable reduction in the temperature, when I order the mixture to be taken less frequently.

Similarly, I hold that the treatment of enteric fever should be conducted upon an acid and not an alkaline method. I believe I have seen an increased blood heat induced by such a remedy, for instance, as salicylate of soda in this disease, with passive pulmonic congestion, from a condition of over-fluidity thus induced, and quickly removed by the administration of fifteen-minim doses of hydrochloric acid every two hours, and drop doses of steel.

I am, Sir, yours truly,
C. R. ILLINGWORTH, M.D. Edin.
Clayton-le-Moors, March 23rd, 1885.

"TAURO-CHOLATE OF SODA PILLS."

To the Editor of THE LANCET.

SIR,—Please let me add to my little paper which appeared in your issue of the 25th ult., that it is better to use pig's-bile than ox-bile in preparing the tauro-cholate of soda; and that the *bulk* of the glyco-cholate—which is not of any therapeutic value—should be thrown out with acetate of lead, avoiding any excess of the acetate before evaporating the tauro-cholate to the consistency for making into pills. Keratin, easily made from the residue of an ethereal digest of horn shavings by boiling in liquor potassæ, forms the best coating.

I am, Sir, yours truly,
Hanover-square, May 12th, 1885. J. MORTIMER GRANVILLE.

"THE COLLOQUIAL LINGUISTIC FACULTY."

To the Editor of THE LANCET.

SIR,—If I may judge by the considerable extract you have given from Dr. W. H. Walshe's new work, reviewed in the current number of THE LANCET, he has raised the novel and very interesting question, "When may a person properly be said to know a foreign language?" But I fear the tests Dr. Walshe has applied are much too sweeping and exclusive to be of any practical value towards its solution. For instance, a well-known linguist of my acquaintance went for a three weeks' holiday into Wales, without knowing a word of the vernacular, and with no aid towards its acquirement but a pocket dictionary. Yet, by a method of his own and by constant intercourse with the peasantry, he learned the language in the above time—i.e., he was able to converse in it, to read and write it correctly, and knew its formation and grammar. Whether he could understand a Gaiety burlesque in the Welsh tongue I had not thought of asking him.

I know I must not trespass upon your space, but I should just like to submit the following points for Dr. Walshe's consideration. What does he say to the number of our Indian officials who converse and correspond in Hindi, Persian, Pashtú, and other Eastern languages? What to the humble missionaries who translate our Scriptures into such difficult languages as Lithuanian, Finnish, Aramaic, and Coptic, to say nothing of the Kaffre click? A friend of mine, a German cavalry officer, himself a native of Westphalia, has told me he was stationed on one occasion with his regiment at Munich, and that it took him six months to become acquainted with the lingo of his Bavarian servant; yet surely the former must be said to have known German.

On the whole, it seems to me that what marks linguistic power in individuals is an initial faculty of learning language, rather than the degree of actual attainment in any particular form of speech, and the Mezzofanti type is by no means so doubtful as Dr. Walshe appears to think.

I am, Sir, yours truly,
Sussex-gardens, May 12th, 1885. T. FITZPATRICK.

SMALL-POX RISKS.

To the Editor of THE LANCET.

SIR,—I was gratified to find that you call attention to the serious risks run by the unrevaccinated in London during the present widespread epidemic of small-pox, and that you instance the well-known immunity of the servants and nurses of the Highgate Small-pox and Vaccination Hospital, and I was further gratified to find your excellent article widely quoted in the daily papers. After all, it is the general mass of the public who are likely to be led away by the specious tales and one-sided reasoning of the anti-vaccinationists, whom we want to reach. I confess that I think the extraordinary efficacy of the protection from small-pox afforded to our nurses and other employées is largely due to the fact that the lymph which the surgeon makes use of at this hospital he has himself taken from a subject he has operated upon, and of the efficacy of which he is consequently well assured; and, moreover, it is used as nearly as possible from arm to arm. I regret that at the other large institutions of the kind in the metropolis those conditions which appear to me to be essential for the absolute security of those confided to their charge are absent, and that the medical officers at such hospitals are compelled to make use of lymph of the quality of which they cannot themselves be absolutely certain. I cannot conclude also without expressing my regret that at the present day, notwithstanding the amount of evidence we have on the subject, a medical man of the standing of Surgeon-Major Pringle should, as in his recent lecture before the Society for the Encouragement of Arts, &c., publicly state his disbelief in the necessity for revaccination in adults who have been efficiently vaccinated. Such a statement is, I think, eminently calculated to encourage the present apathy of the general public as regards revaccination, and is certainly not warranted by the statistics of his professional brethren, at all events in Europe.—I remain, Sir, yours faithfully,

HERBERT GOUDE, F.R.C.S. Edin.
Small-pox and Vaccination Hospital, Highgate-hill, N.,
May 9th, 1885.

LIVERPOOL.

(*From our own Correspondent.*)

HOSPITAL SATURDAY IN LIVERPOOL.

SATURDAY, April 25th, was observed here as Hospital Saturday, boxes being distributed among all places where large bodies of working men are employed, and cages being attached to the street lamps at reasonable intervals. The result will be watched with keen interest this year, extraordinary pains having been taken to ensure the increased success of this mode of obtaining the working men's support to the hospitals, which are such a benefit to them. The amount collected in former years, averaging between £400 and £500, has been justly regarded as considerably less than what might be expected in so large a district, containing such an enormous number of working men. Up till the 9th inst. the sum of £2357 had been received; more is expected to come in. To enhance the success of the movement this year, and to assist the general committee, a committee of working men was appointed last year, and at a meeting of the former, on the 7th inst., the following resolution was carried unanimously: "That this committee hereby offer their thanks to the working men's committee for their valuable assistance in increasing the amount of the Hospital Saturday contribution, and express the hope that their services will be continued."

THE SCHOOL OF MEDICINE.

The summer session commenced on the 4th inst. Considerable alterations have been made in the anatomical department of the building, by which further accommodation will be afforded, and an increased number of students will be enabled to dissect conveniently to themselves and to each other. On the 11th inst. there were nine subjects in the dissecting-room, on which between thirty and forty students were practising dissection. Mr. Frank T. Paul, formerly surgical tutor, now lectures on Medical Jurisprudence and Toxicology. At the recent examination ten students from this school passed in Anatomy and nine in Physiology, only one being rejected in both subjects.

THE LIVERPOOL UNIVERSITY COLLEGE.

At the last meeting of the Council of University College, a gift of £1500 was announced as having been received from Mrs. Sheridan Muspratt, widow of the late eminent Professor of Chemistry. This sum is to be applied for the endowment of a scholarship or scholarships in furtherance of the study of chemistry, and in commemoration of her late husband.

THE SPRING ASSIZES.

At the recent assizes the calendar was unusually light, there being no charge of murder and comparatively few cases of violence. What is still more remarkable, there was not a single charge of rape or criminal assault on females, although these assizes comprise the whole of South-west Lancashire with a number of small county towns, where such crimes have been lamentably frequent of late. It is therefore probable that the very severe sentences passed for those offences by Mr. Justice Day, who at the last three assizes presided in the Crown Court, have had their effect.

THE LATE MR. FREDERICK PHILIP PHELPS, SURGEON, OF EXETER.

The tidings of this gentleman's death under the melancholy circumstances noticed in last week's LANCET will be received with sincere regret by many local readers, who will remember the deceased when he was house-surgeon at the Northern Hospital more than twenty years ago. He was extremely popular with all who knew him, from his unvarying kindness to all with whom he had to deal, whether colleagues, subordinates, or patients, as well as his genial humour and constant cheerfulness.

BIRMINGHAM.

(*From our own Correspondent.*)

LAUDANUM IN WHOOPING-COUGH.

IT seems to be a Utopian idea that in the care for sick children among the poorer classes intelligence and prudence in the use of patent drugs will ever be the rule and not the exception. An inquest was held a few days ago on the body of a child ten and a half years old, who had suffered from whooping-cough. The mother, on the advice of a neighbour, purchased a pennyworth of laudanum, mixed it with vinegar and treacle, and gave it to the child a teaspoonful at a time. The quantities of the two latter ingredients are not mentioned, but the result showed that they could not have been large, for the child died after the second dose. The mother stated that she informed the chemist that she intended to give the compound to the child as physic, but no restrictions are placed upon the sale of powerful drugs with such an intention. The verdict of death from misadventure carries but poor comfort with it, and will probably not go far in teaching this class that the use of opium for young children, even in small quantities, is highly dangerous and improper in unskilled hands.

DAMAGES FOR THE BITE OF A DOG.

It is interesting to note a judgment given in the county court for damages in a case of this kind. The plaintiff, a working man, claimed £100, and was awarded £36, for the loss of time and injury caused to his leg. Fortunately for the patient he was able to prove that the dog was a ferocious one, and accustomed to bite mankind, and the law which allows compensation only under these circumstance enabled him to make his claim good. It is well that those who keep vicious dogs with a known propensity to bite people should be aware of the pecuniary risk attending such an indulgence.

TEMPERANCE ADVOCACY.

At a recent conversazione of the Ladies' Central Temperance Association a distinguished physician was selected to hold forth in support of the cause so strongly espoused by the Association, and to denounce the use of intoxicating beverages. To the consternation of the audience, however, though brought to curse, he remained to bless, and in forcible language he dwelt upon the intemperate temperance of some abstainers. In glowing terms he upheld the good which in occasional circumstances moderate drinking is capable of effecting, and pointed out the value of the judicious use of alcohol. His position, which he described as logically and scientifically sound, somewhat startled his audience; and if it did no more, must have aroused them to think how far they were right in not clearly ascertaining his views before they sent a deputation to ask his countenance and support at such a meeting.

Birmingham, May 13th, 1885.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NEWCASTLE MEDICAL COLLEGE AND THE CORPORATION.

THE premises at present occupied by the College of Medicine are likely to be taken over for railway extension, and an application has been made to purchase, I understand at a cost of £10,000, an eligible site in one of our principal thoroughfares. The Corporation is the trustee of the site, and it so happens that it is part of an ancient charity left for the benefit of the poor of the city. I believe it is the contention of the medical authorities that the grant of the site would be a great benefit to medical education and an advantage to the city from the number of resident students attending, and so be an indirect advantage to the poor as in some way adding to the trade of the city and paving the way for its becoming some day the seat of the University of Newcastle. This view was advanced with great ability and eloquence by Dr. Heath, who headed a deputation from the College to the Corporation the other day. The granting of the site on the terms proposed by the College is held by some members of the Corporation at least as being beyond the powers of their trust, seeing that the College only offers £10,000 for a site worth, at least, three times as much, and that in this matter the College is to be treated as any other purchaser making an offer for the land. But on the other hand, Dr. Heath pointed out that "the proprietors of the College building could a few years ago have sold the building with profit and divided the proceeds among themselves, but that they scorned to do anything of the kind; they held it for public use and for the benefit of medical education." The question has been now well and forcibly put before the Corporation, and it is to be hoped it may be decided solely on its merits.

NEWCASTLE NATURAL HISTORY MUSEUM.

All visitors to Newcastle should visit the museum of the Natural History Society, which, it will be remembered, was opened by the Prince of Wales on his late visit to our city. The museum is now in very complete condition so far as a museum can ever be considered so, in view of the many additions a good one must from time to time receive. Only just lately Miss Mary Hancock presented the complete set of the original drawings of the British Nudibranchiate Mollusca, the work of her late brother, Mr. Albany Hancock. These drawings were made by him to illustrate a large work published by the Ray Society. By the perfectly natural and clear manner in which details are shown, this work sheds much light on a group of creatures till then comparatively unknown even to naturalists themselves. For another work, illustrated by beautifully and delicately elaborated drawings which Mr. Albany Hancock had undertaken at the urgent request of several scientific friends in London, he received the gold medal of the Royal Society for 1858. This presentation was the first ever made to a native of Newcastle. The Bewick collection and the Hancock drawings are now on the walls of our museum, and well worthy of a visit from all interested in nature and art.

VACANT HOSPITAL APPOINTMENTS IN NEWCASTLE.

There is now an unusual number of hospital appointments vacant in Newcastle. As well as the vacancy at the Chest Hospital, mentioned last week, an honorary physician and surgeon is wanted at the Children's Hospital. Dr. J. G. Houseman and Dr. Coley are candidates for the physician's post and Dr. Aitchison and Mr. W. Glaholm Black for the surgeoncy. At the infirmary Dr. Limont is, so far as I have heard, the only candidate for the vacant physicianship. Dr. Limont has been acting as senior resident medical officer to the house for more than three years. For some time he has devoted himself specially to physician's work; and he asks the committee to release him from the post to enable him to compete for the higher appointment.

Newcastle-on-Tyne, May 11th.

EDINBURGH.

(*From our own Correspondent.*)

A LIME-LIGHT FOR DEMONSTRATION PURPOSES.

AT the fortnightly meeting of the Edinburgh Medico-Chirurgical Society, Dr. Foulis gave a demonstration of the circulation in the web of a frog's foot and of some botanical test objects by means of the oxyhydrogen light. The light, transmitted through a powerful condenser, passed through an ordinary microscope lens, and was thrown upon a large plate of ground glass at a distance of about 25 ft. The image of the object demonstrated could be focused on this plate with great exactitude, the definition even with high powers being excellent, and the general effect strikingly satisfactory.

A RARE FORM OF ICHTHYOSIS.

Dr. Allan Jamieson exhibited a drawing from a case of ichthyosis palmaris et plantaris. The palms and soles of the patient were covered with a horny growth a quarter of an inch thick, which gave a loud resonant note when struck. All other parts of the skin were absolutely normal, and the only other morbid symptom was the very rapid growth of the nails both of the fingers and toes. In Dr. Jamieson's experience a case of ichthyosis with such exact delimitation of the areas affected was absolutely unique.

SUBPERIOSTEAL SURGERY.

Dr. C. W. MacGillivray exhibited portions of bone removed subperiosteally from the lower end of the humerus in a case of compound fracture and dislocation. The whole of the bone removed was replaced by a new formation, and the result of the operation was a movable and useful joint.

LARYNGEAL PARALYSES.

Dr. McBride read a paper on the above subject, dealing specially with bilateral paralyses, and illustrated by the records of several interesting cases. An observation of some importance was the detection of paralysis of both laterales in a case of locomotor ataxia, in which all the usual symptoms were well marked. He specially insisted on the value of laryngeal examination as an important adjunct to the diagnosis of various morbid conditions.

THE SCIENCE AND ART MUSEUM.

An extensive addition has just been commenced which will complete the Museum buildings as originally designed. For some time there has been overcrowding of specimens in several of the departments, rendering increased accommodation very desirable; and the crying need for a properly fitted library, where the public can avail themselves of the valuable collection of books possessed by the Museum, will at length be satisfied. Colonel Murdoch Smith has been appointed Director, a post left vacant by the sudden death of the late Professor Archer. Colonel Smith has a considerable reputation as an antiquarian, and has enriched both the British and South Kensington Museums by valuable collections made in the East. These public services have received their due recognition in the important post to which he has been appointed; and there is every reason to expect that he will prove no unworthy occupant of the place once filled by such men even as the genial and versatile Dr. George Wilson.

Edinburgh, May 11th.

IRELAND.

(*From our own Correspondent.*)

ROYAL COLLEGE OF SURGEONS.

AT the last meeting of the Council, a letter was received from Mr. O'Reilly-Dease offering a portrait of Mr. Butcher, the eminent Dublin surgeon, and also proposing to build a hall for the reception of Mr. Butcher's museum, in the event of that gentleman giving it to the College. Dr. Cameron vice-president of the College, stated that he was authorised by Mr. Butcher to offer his museum, and that Mr. Wheeler, to whom Mr. Butcher had promised to bequeath it, had kindly waived his claim. On the motion of Mr. Colles, seconded by Sir George Porter, the thanks of the Council were voted to each of the gentlemen concerned. The annual election of examiners, which had been arranged to take place on the 19th inst., has, in view of the expected new charter, been postponed to the 27th. It is confidently expected that several changes will occur, and some new blood be infused into that body. Among the various candidates who will come forward will be Mr. Swanzy to examine in ophthalmic surgery, Dr. Mapother in physiology, and Dr. Robinson in anatomy.

DEATH OF MR. JOHN NEILL, RESIDENT SURGEON, STEEVENS' HOSPITAL.

It is with deep regret I record the death of this promising young surgeon, at the early age of twenty-five, from blood poisoning. He died rather suddenly, and it is a doubtful point whether the cut which he received on making a post-mortem examination and which caused the blood poisoning was complicated with scarlatina or not. Mr. Neill was a private teacher of considerable repute, and was connected with the Ledwich School of Medicine as a demonstrator of anatomy, where he was much liked and where his loss will be greatly felt. Thoroughly straightforward in all his actions, kind in disposition, and unassuming in manner, he made friends everywhere, and his sudden and untimely decease is widely regretted. Mr. Neill's funeral took place on Tuesday last and was largely attended, a notable feature being the presence of about one hundred students, who walked in procession from Steevens' Hospital to the place of interment. It is contemplated by the students to present an address of condolence to Mr. Neill's father on his sad bereavement.

Dr. H. B. Fleming has been unanimously elected medical officer to the Omagh workhouse, in the room of his father, Dr. H. Fleming, resigned.

At a meeting of the Royal Cork Yacht Club, last week, Dr. Tanner was removed from the list of members on account of his action on the occasion of the Royal visit.

Small-pox is reported to have broken out at Enniskillen.

Dublin, May 12th.

ROYAL COLLEGE OF SURGEONS.

AT an ordinary meeting of the Council of the College, held on Thursday, May 14th, the usual resolutions were passed fixing the date (July 4th) for the election of members of Council, in place of Messrs. Erichsen, Holmes, and Savory, who retire. It is probable that the two former will not seek re-election.

The report of the Committee in reference to the required certificate of instruction and proficiency in the practice of vaccination was received as follows:—"The Committee recommend to the Council that the existing regulation on the subject of the recognition of certificates in vaccination should remain in force, not only on account of the obligations of the College to the Local Government Board in England and the agreement with the Royal College of Physicians under the Scheme for the Examining Board in England, but because by recognising other certificates the value of the diploma would be depreciated to future Members of this College. The Committee have, at the same time, further to report that they have reason to believe that if a representation were made by the Council of Queen's College, Belfast, to the Irish Local Government Board suggesting that that Board should invite the English Local Government Board to confer with a view to the establishment of educating vaccination stations in Ireland, subject to terms to be agreed upon by both Boards, the difficulty under which Irish candidates for the diploma of this College now labour might be surmounted."

The following recommendations of the Committee of Management were approved:—"1. That every member of the University of Edinburgh who shall have passed such an examination or examinations at his university as shall comprise the subjects of the First and Second Examinations of the Examining Board in England, and who shall have completed not less than four years of medical study according to the regulations required by his university, be eligible for admission to the Third or Final Examination of the Board, two years after his having passed all the other required examinations; that every candidate so admitted to examination be required to pay a fee of five guineas; and that every such candidate who shall have passed such Third or Final Examination shall, on the further payment of not less than twenty-five guineas, and subject to the bye-laws of each College, be entitled to receive the licence of the Royal College of Physicians of London and the diploma of Member of the Royal College of Surgeons of England. 2. That the regulation exempting candidates, members of universities, from any part of the examinations of the Examining Board in England do continue in force so long only as the examinations of the universities shall be satisfactory to the Committee of Management. 3. That the regulation applicable to the conditions of the admission of members of the English universities to the Third or Final Examination of the Examining Board in England be extended to such of the Scotch and Irish universities as require that not less than two of the four years' curriculum of professional education shall have been spent in residence at the university."

The President and Vice-Presidents' report on Sir James Paget's resolution, that a marble bust by Mr. Brock, A.R.A., of Sir Erasmus Wilson be placed in the College, was adopted.

The following motion, of which he gave notice at the last meeting, was moved by Mr. DURHAM, seconded by Mr. SAVORY, and carried unanimously:—"That seven delegates from this College be appointed with authority to invite an equal number of delegates from the Royal College of Physicians to meet and confer upon what steps, if any, can be taken to enable the two Colleges to obtain the legal right of giving the title of 'Doctor' to persons who shall have obtained the licence of the Royal College of Physicians of London and the diploma of the Royal College of Surgeons of England."

The delegates appointed were: the President, the Vice-Presidents, Sir Joseph Lister, and Messrs. Marshall, Hulke, and Durham.

MEDICAL NOTES IN PARLIAMENT.

The Case of Mr. Hillman.

IN the House of Commons on the 7th inst., in reply to Mr. W. Corbet, who asked whether it was true that in the Court of Appeal the Lord Chief Justice of England decided in favour of Mr. Hillman, while two other judges held opposite views; and whether he would cause the law regarding the confinement of persons alleged to be insane to be so altered as to be intelligible to those who had to administer it,—Sir W. Harcourt stated that the Court of Appeal seemed to have decided that the detention of Mr. Hillman was lawful, and he could not admit that he was unlawfully placed in the asylum. He had no doubt the attention of the Lord Chancellor would be called to this matter in connexion with the Bill now under consideration.

Inoculation for Cholera.

On the 8th inst., in reply to Dr. Cameron respecting the discovery reported to have been made by Dr. Jaime Ferran of Valencia, in connexion with inoculation for cholera, Lord E. Fitzmaurice stated that Her Majesty's Minister at Madrid would be instructed to send home translations of any papers of Dr. Ferran's, and reports of the Madrid Academy of Medicine on the subject.

The Royal University (Ireland).

On the 11th inst., in reply to Mr. Kenny, Mr. Campbell-Bannerman stated that a power was granted to the Senate of the Royal University in their original charter, but lasting for three years only, with a view to facilitating the obtaining of degrees by medical men qualified before the passing of the Royal University Act. It expired in November last, and the Senate have not sought to have it renewed. There was an obvious reason for giving it in the first instance, which does not now hold good, and he was not aware of any intention to revive it.

Mortality from Small-pox.

On the 12th inst., in reply to Mr. Hopwood, Mr. G. Russell stated that two tables as to the mortality from small-pox, which were compiled respectively by Dr. Greenhow and Dr. Farr, could be found in the Appendix to the Report of the Select Committee in 1871 on the Vaccination Acts. According to these tables, the small-pox death-rate in London was 3044 per 1,000,000 in 1746-55; and 5020 per 1,000,000 in 1771-80. In 1871-80 the mortality, according to the returns of the Registrar-General, was 460 per 1,000,000.

Medical Relief and the Franchise.

On the report of the English Registration Bill, Mr. Davey moved the addition of a clause providing that the receipt of parochial medical relief should not disqualify a voter. The clause was opposed by the Attorney-General; but after some considerable discussion was carried by 87 to 50.

The Hospital on Quarantine Island.

On the 14th inst., Lord Hartington, in answer to Lord E. Cecil, who inquired whether he would ascertain if it was true that the Auxiliary Hospital on Quarantine Island, at Sawakin, stood on an old burial-ground, and that great sickness prevailed there just now in consequence of the unhealthiness of the situation, said that there was a hospital which had been selected by the authorities on the spot. When it was first suggested, he had doubts as to the salubrity of an island that had been a burial-ground. A telegram was sent to Sawakin, and in reply he was informed that the island was most healthy. For six years past scarcely a burial had taken place, and there was no reason to believe it would be unhealthy.

Vaccination.

Mr. G. Russell, replying to Mr. Hopwood, who asked whether the President of the Local Government Board was aware that by a house-to-house visitation of 15,000 houses in West Ham, instituted by Dr. Kennedy, it had been ascertained that the inhabitants are vaccinated in number up to the average of 98 per cent., said the figures in the question were inaccurate. Some complaint had been made of the system of sewers and drains in West Ham, and he had directed an inspector to make inquiries on the spot.

Overwork at School.

Mr. Mundella, in answer to General Feilden as to whether it was true that a young girl had committed suicide on account of overwork at school at Adlington, said inquiry had been made, and it was found that she was the daughter of a dairyman and worked in a cotton mill. As she was under thirteen, she attended school half-time, was in a low standard, and had no home lessons. She had a deal of farm work to do in carrying out milk. Her companions said she had complained of harsh treatment on the part of the woman who employed her at the factory, and that was the cause of her suicide. The school was well conducted, and no blame attached to the teacher in this case. Mr. Mundella added that more labour was exacted from children of tender years in England than in any other country in Europe.

The Sanitary Conference at Rome.

Lord E. Fitzmaurice, in reply to Mr. Sutherland, said Her Majesty's Government have accepted an invitation to a scientific and sanitary conference which is about to meet at Rome, and will examine the best methods of preventing the spread of cholera. Sir Guyer Hunter, who was employed in Egypt during the epidemic of 1883, and whose valuable reports have been laid before Parliament, and Dr. Thorne, the Assistant Medical Officer of the Local Government Board, will be the British delegates. The recommendations of the Conference will be in the usual course submitted to the

Governments represented, but will not have any binding force until they have been adopted by those Governments. It would be contrary to practice to make public at present the instructions given to the British delegates.

Obituary.

DR. DIOMEDE PANTALEONI.

THIS distinguished physician and patriot, whose death on the 3rd inst. we announced last week, was born seventy-seven years ago at Macerata, an ancient university town in the Marches. There he prosecuted his studies, preparatory and professional, and there he took his degree. Like many public-spirited Italians of that day, he was swept into the vortex of the revolution, and his time was pretty evenly divided between medical practice and politics. From 1848 to 1860 the States of the Church were in periodical upheaval, and shortly after the former of these dates Dr. Pantaleoni, who had settled in Rome, and had rapidly risen in public esteem as an able and accomplished physician, had from pontifical persecution to expatriate himself. This part of his career is dramatically described in his countryman Ruffini's "Doctor Antonio," of which fascinating tale he is known to be the hero. "He enjoyed," says the leading Italian journal, the *Opinione*, "the confidence of Count Cavour, and of that great minister's chief coadjutors in the work of national unity, while the historian will one day record the many onerous political missions carried out with sagacity and courage by the practitioner from the Marches—missions fraught with the best results for the complete liberation of Italy, and for her harmonious unification under the house of Savoy." In 1851 he was in London, the intimate friend of many leaders of the profession, and assisting in a silent and successful way the movement for that consummation which all true Italian patriots had at heart. Massimo D'Azeglio, the then Prime Minister of the Sardinian Government, had thus recommended him to his nephew, Emanuele D'Azeglio, the representative of King Victor Emanuel at the British Court:—"Pantaleoni is my familiar. He is the leading consultant physician to the foreigners in Rome; he is my right-hand man in all my chief transactions; no believer in the Republic, the promoters of which wanted to stiletto him; a Monarchist of lofty character and equal intelligence; an excellent person in all respects, and devoted to our views. Get him to speak on Italy, and you will find his talk worth volumes." Scarcely had the country organised itself constitutionally, when his native Macerata chose him as her representative in the national Parliament, and Cavour employed him in an important series of overtures to bring about, through Cardinal Santucci, a *modus vivendi* with the Papal Court. In 1873 he resigned his seat in the Chamber of Deputies, and by the royal decree of Nov. 6th of that year he was made a Senator of the Kingdom, in which capacity he did splendid service, particularly on all questions of academic education and of sanitary reform. All this time he was in extensive practice, not only among his fellow countrymen, but also among the foreign visitors who annually resort to Rome, many of whom are alive to attest his painstaking and successful treatment. To the Accademia Medica di Roma and the Royal Institution of the "Lincei" he contributed numerous important papers, the more practical of which are, we believe, about to be collected and to assume an independent and enduring form. On all questions of the climate of Rome, her water-supply, and the rules to be observed by the stranger within her gates, he was an acknowledged master; while no properly accredited professional brother, whatever his nationality, ever sought his advice in vain.

Among the works with which he employed the spare hours of his busy days and nights may be mentioned the "Storia Civile e Costituzionale di Roma dai suoi Primordi sino agli Antonini" (Civil and Constitutional History of Rome from its first beginnings to the Antonines), and "L'Ultimo Tentativo del Cavour per la Liberazione di Roma nel 1861" (The last attempt of Cavour for the Liberation of Rome in 1861). From these, especially the former, may be gathered some notion of his wide and deep knowledge and his vigorous thinking, while their style has all the characteristics of the independent investigator schooled in scientific and classical study.

His funeral, which took place on Tuesday, the 5th inst., was a public one. His native town of Macerata having signified its wish to possess his remains, these were accompanied from his house in the Via Ripetta to the railway station, the *cortège* being thus composed:—A company of the Municipal Guards, followed by a military band performing a dead march, and by a battalion of the 79th Infantry. Next came the hearse, covered with magnificent wreaths, contributed by the Town Council and by the chief learned societies; and this, again, was followed by a numerous train of senators, members of the legislative body, the leading physicians and surgeons of the city and province of Rome, representatives of all the scientific associations, and many personal friends in carriages or on foot. The cordons of the hearse, which was surrounded by the ushers of the Senate House, were held by General Durando, the President, and the Marquis Caracciolo Di Bella, the Vice-President, of the Upper Chamber; by Signor Tartufari, Councillor of the Court of Cassation and representative in Parliament of the constituency of Macerata; the Senator Count Cadorna, President of the Council of State; Dr. Bastianelli, Municipal Assessor; Professor Guido Baccelli, President of the Academy of Medicine; the distinguished Hellenist, Mariotti; and Signor Gravina, Prefect of Rome. The route along the Corso and Via Nazionale was lined by a dense and respectful crowd, and on the *cortège* reaching the station, the Commendatore Righetti, the most intimate friend of the deceased, pronounced a funeral oration of singular propriety and power. The coffin, having been consigned to the Ancona train, was received by the Municipality of Macerata, the scene of interment.

Medical News.

COLLEGE OF PHYSICIANS IN IRELAND.—At the May examinations the following obtained the licences in Medicine and Midwifery of the College:—

MEDICINE.—Elizabeth Bielby, Theodore D. Browne, Fitzwilliam Richard Augustus Evans, George Edw. Joseph Greene, Wilson Mills Nugent, Henry Stoker, M. Andrew Wade, Joseph Theophilus Weston.

MIDWIFERY.—Elizabeth Bielby, Theodore D. Browne, Thomas Joseph Dillon, Fitzwilliam Evans, George Edward Greene, Samuel Horneck, Henry Stoker, George Scott Tate, M. Andrew Wade, J. Theophilus Weston.

The undermentioned have been admitted Members:—

James Ellis. | Samuel Hamilton.

UNIVERSITY OF DUBLIN.—The following degrees have been recently conferred by the Senate of this University:—

BACHELOR IN SURGERY.—Orlando Palmer Beater, Andrew Grierson Faussett.

BACHELOR IN MEDICINE.—Orlando Palmer Beater, Andrew Grierson, Faussett.

DOCTOR IN MEDICINE.—Orlando Palmer Beater.

ROYAL UNIVERSITY OF IRELAND. — The undermentioned have passed the M.B. Examination of this University:—

Samuel Alexander, John Barron, James R. Burrows, Alexander Corry, *G. B. Crawford, M. H. Curtin, T. W. Dwyer, Robert English, G. H. Foott, R. E. Foott, R. M. Griffin, M. H. Hannigan, W. R. Hawkins, Daniel Hennessy, W. J. Loughrey, J. McAleer, Michael McCarthy, W. B. McWha, G. F. Marks, John Meenan, *J. Musgrave, James J. Nagle, John J. O'Brien, J. P. O'Byrne, R. Pettierew, *E. L. Pooler, *John Ryan, J. Martin Savage, William Sexton, J. Henry Sharpe, Norman Smythe, *R. Thomson, *F. J. Tresillan, J. J. Walsh, M. J. Whitty, Samuel Wilson.

*Permitted to compete at the Honours Examination.

THE new workhouse infirmary at Croydon, erected at a great cost, is to be opened to-day (Saturday) by the Archbishop of Canterbury.

GLAMORGAN AND MONMOUTH INFIRMARY. — Miss Shand, who died recently in the Principality, has bequeathed £8000 to the trustees of the infirmary.

DANIEL MURRAY O'HARA, surgeon, sentenced to ten years' penal servitude for extortion, is reported to have strangled himself in Liverpool Gaol on the 7th inst.

AT the annual dinner of the Royal Hospital for Children and Women, which was held on the 13th inst., subscriptions amounting to more than £80 were received.

VACCINATION GRANTS.—Dr. Dugald Campbell, of Alfreton, Derbyshire (second time), Mr. Peter Swales, of Sheerness (seventh time), and Mr. T. Osborne-Walker, of Crick, Northamptonshire (second time), have received the Government grant for efficient vaccination.

Presentation.—Miss Williams, who was for seven years matron at St. Mary's Hospital, has been presented by her friends at the institution with an illuminated address and a silver tea-service.

London Fever Hospital.—The Lord Mayor has consented to preside at the second festival dinner in aid of the London Fever Hospital, which is to be held at Willis's Rooms on Tuesday, June 23rd.

University College, London: Faculty of Medicine.—The distribution of prizes will take place on Wednesday, May 20th, at 4.30. The Right Hon. Lord Justice Fry, M.A., F.R.S., Vice-President of the College, will preside.

Animal Vaccine.—It is stated that the authorities of Strasburg have published a regulation making the use of animal lymph for vaccination compulsory. Offices for its supply are to be inspected every ten days by the Government vaccinators.

The annual general meeting of the Royal Medical Benevolent College will be held on the 21st inst., when the result of the polling for pensioners and foundation scholars will be announced. All balloting-papers are to be returned not later than the evening of the 18th inst.

At a meeting of the Anthropological Institute on the 12th inst., the Earl of Northesk exhibited a collection of specimens of worked Jade from New Zealand. Mr. J. H. Kerry-Nicholls read a paper on the Origin, Physical Characteristics, and Manners and Customs of the Maori race.

The Meath Hospital, Dublin.—The following gentlemen have been awarded prizes for the Winter Session 1884-5:—Senior Medical Prize: Henry Walter; Junior Medical Prize: John T. Russell. Senior Surgical Prize: R. D. Penefather, John T. Russell, and William J. Taylor, equal; Junior Surgical Prize: Alfred William Bewley, 1st, A. E. Mahood, 2nd.

A meeting of graduates of the University of Aberdeen was held in Manchester on the 6th inst., for the purpose of welcoming Professor Ogston on his return from the Soudan. In his speech Dr. Ogston dwelt at some length on his Sawakin experiences, stating his high approval of the efficiency of the Army Medical Department and the care with which the wounded were treated.

The Report of Colonel Haywood, engineer and surveyor to the Commissioners of Sewers, on the works executed by the Commission during 1884, has been issued. It states that the total length of sewers constructed during the year was 1163 feet, of which 1070 feet were upon the lines of old sewers. The Metropolitan Railway Company in connexion with their works between Cannon-street and Aldgate had to construct new sewers to the extent of about 7190 feet.

The Zoological Society of London.—At the fifty-sixth anniversary meeting of this Society, which was recently held, Mr. William T. Blanford, F.R.S., Dr. A. C. L. G. Günther, F.R.S., Dr. Edward Hamilton, Mr. E. W. H. Holdsworth, and Surgeon-General L. C. Stewart were elected to the Council in place of the retiring members, and Professor W. H. Flower was re-elected president, Mr. Charles Drummond, treasurer, and Mr. Philip L. Sclater, M.A., Ph.D., F.R.S., secretary to the Society for the ensuing year.

University of Cambridge.—There will be an examination in certain branches of natural science for minor scholarships at Downing College on Tuesday, June 2nd next, and following days. Persons who have not entered at any college in the University are eligible to these scholarships, which will be of the value of from £40 to £70 per annum, and tenable until their holders are of standing to compete for a foundation scholarship. Further information will be given by Dr. Perkins or the Rev. J. C. Saunders, tutors of the College.

Royal National Lifeboat Institution.—The Committee of this Society, which has now been established sixty-one years, in their annual report for 1884 state that during the year twenty-eight new lifeboats were despatched from the store-yard, a number greatly in excess of that sent out during any one year since 1866. The total number of boats now under the management of the committee is 284, which were instrumental in saving no fewer than 633 lives and 18 vessels between Jan. 1st and Dec. 31st, 1884. In the last sixty-one years as many as 31,355 lives have been saved through the instrumentality of the institution. Six silver medals and clasps, nine vote of thanks on vellum, and £5000 in money were granted by the committee for saving life in 1884. The total expenditure of the lifeboat service amounted to £52,724, while the receipts of the institution in subscriptions, donations, and dividends amounted to £44,810.

The late Peter Squire.—Friends of the late Peter Squire will be interested to know that the unveiling of a medallion portrait of him will take place at the Pharmaceutical Society's House, 17, Bloomsbury-square, on Wednesday, May 20th, at 4 p.m., by Sir Spencer Wells, Bart.

Compulsory Notification at Dover.—A meeting, presided over by Sir Richard Dickeson, has been held at Dover, when deputations attended to represent the whole of the sanitary and Local Government Board districts in East Kent. The principal matter which occupied attention was the question of the public notification of infectious diseases. It was decided to forward a memorial to the Local Government Board, urging upon them the desirability of a legislative enactment for the compulsory notification of infectious diseases.

Royal Hospital for Incurables.—The annual dinner in aid of the funds of this institution was held on the 7th inst., when it was stated that there are now 193 inmates and 476 out-pensioners, the qualification for admittance being not simply age or even poverty, but the pressure of incurable disease often combined with both. The expenditure amounts to over £21,000 per annum, and since 1881 it has been found necessary to sell out £15,000 of the funded stock. During the evening subscriptions and donations amounting to £4665 were announced.

University College Hospital.—The festival dinner in aid of the funds of this institution was held on the 13th inst., the Prince of Wales presiding. During last year in-patients had been received to the number of 3152, as against 2849 in the previous year; while the out-patients were 33,743, as compared with 24,187 in 1883. The annual subscriptions to the hospital amount only to £2047, while the necessary annual expenditure is £19,500, and the only reliable income it receives from all sources is £6500. During the evening subscriptions amounting to over £5000 were announced by the secretary.

Midland Medical Society.—Mr. James Harmar, to whose long and most faithful services as honorary treasurer the success of the Midland Medical Society has been largely due, has recently resigned office. The members of the Society, under the presidency of Mr. T. H. Bartleet, have signalised their high appreciation of Mr. Harmar's services by presenting him with an illuminated address, a timepiece, and two silver candlesticks. The contributions overflowed, leaving a surplus, which, at Mr. Harmar's request, has been handed over by his successor, Mr. John Garner, as a donation to the Birmingham Benevolent Society.

Glasgow Royal Infirmary School of Medicine, Winter Session, 1884-85.—Prize and Honorary Certificate List:—Chemistry: Chemical Division—Prize, J. H. Miller. Medical Division—1st Prize, Robert C. Wakefield; 2nd Prize, W. J. France. Honorary Certificates: J. W. Lax, Thos. McCubbin, William McLeod, A. J. Harwood, J. J. Wilson, J. L. Wilson, Alex. McDonald, R. W. Roberts. Anatomy: Senior Division—Prize, Joseph Beadle. Honorary Certificates (in order of merit): J. Owen Jones, Gwllym Evans, J. R. Lloyd Jones, Frank A. Elkins, Edward Brooks. Junior Division—Prize, Robert C. Wakefield. Honorary Certificates (in order of merit): W. R. Walker, W. J. France, J. W. Lax. Practical Anatomy (in alphabetical order): Senior Division—Joseph Beadle, Edward Brooks, Gwllym Evans, Alfred J. Harwood, Hugh Owen Hughes, John Owen Jones, J. R. Lloyd Jones, Thomas C. Jones. Junior Division—W. J. France, John W. Lax, Alex. McDonald, Robert W. Roberts, Robert P. Williams. Physiology: 1st Prize, Robert C. Wakefield; 2nd Prize, John R. Lloyd Jones. Honorary Certificates: John Owen Jones, Frank A. Elkins, Randolph O. Willis. Surgery: Gold Medals, Foden Wilson, Robert H. Parry. Honorary Certificates: Fred. W. Ord, Alfred W. White, William Valentine. Medicine: Prize, Foden Wilson. Honorary Certificate, John Thomas. Materia Medica: 1st Prize, Robert H. Parry; 2nd Prize, Joseph S. Sergeant. Honorary Certificates: Thomas Jones, Edward Brooks, John Owen Jones.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BAILEY, T. RIDLEY, M.B.Ed., has been appointed Medical Officer of Health for Bilston, vice S. G. Gilbert, deceased.

BARNARD, ARTHUR TOMSON, M.R.C.S., L.R.C.P., has been appointed Junior House-Surgeon to the Royal Albert Edward Infirmary, Wigan, Lancashire.

BARNARD, CHAS. E., M.D., has been appointed Health Officer for the Port of Hobart, Tasmania, Superintendent of Vaccinations, and Government Medical Officer, at a salary of £300 a year.

BARROW, FREDERICK, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse, Rothbury Union, vice Todd.

BRIGGS, HENRY, M.B., F.R.C.S.Eng., has been appointed Surgical Tutor at the Liverpool Royal Infirmary, vice F. T. Paul, F.R.C.S.Eng., resigned.

CAHILL, THOMAS, M.D., C.M.R.U.I., has been appointed Honorary Medical Officer to the Wellington Hospital, New Zealand.

HARRIS, DAVID, M.R.C.S., has been appointed Medical Officer *for the* First District of the Holborn Union.

HORAN, EDWARD, M.D., C.M.R.U.I., has been appointed Surgeon to the Charters Towers District Hospital, Queensland.

KENWORTH, JOHN WHITE, M.D.Lond., M.R.C.S., has been appointed Surgeon Superintendent to the Napier Hospital, New Zealand.

MILLER, JOSEPH EWING, A.B., M.B., B.Ch., Trinity College, Dublin, has been appointed House-Surgeon to the Chester General Infirmary, vice Dr. A. Macpherson, resigned.

MORGAN, E. RICE, M.R.C.S., L.S.A.Lond., has been appointed Certifying Factory Surgeon *for the Morriston District*, vice Henry Davies, L.R.C.P.Lond., &c., deceased.

MORGAN, Mr. W., has been appointed Analyst for the Borough of Monmouth.

NASON, C. S. STEPHEN RICHARD, M.D., M.Ch.Dub., has been appointed Medical Officer for the Redmarley District of the Newent Union, vice Boughton.

RANDS, S. JOHN OUTLAW, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Bransford District of the Bosmere and Claydon Union, vice Elliston, resigned.

SALTER, FRANCIS JOSEPH, L.R.C.P., L.R.C.S.Ed., has been appointed House-Surgeon to the Devonshire Hospital, Buxton, vice A. M. Jackson, M.B., resigned.

SHEWEN, ALFRED, M.D.Lond., has been appointed Physician to the Prince Alfred Hospital, and Joint Lecturer on Clinical Medicine, at the University of Sydney.

SIMMONS, HAROLD, M.R.C.S., L.S.A.Lond., has been appointed Physician's Assistant to the Middlesex Hospital.

SYKES, JOHN FRED. JOSEPH, M.B., C.M., B.Sc.Ed., has been appointed Medical Officer of Health for the Parish of St. Pancras, vice Mr. Shirley Murphy, resigned.

SYMES, WM. HENRY, M.D., C.M.Ed., has been appointed Honorary Medical Officer to the Christchurch Hospital, New Zealand.

WILLIAMS, GEORGE HERBERT, M.R.C.S., L.R.C.P.Ed., late House-Surgeon to the Royal Infirmary, Manchester, has been appointed House-Surgeon to the North Lonsdale Hospital, Barrow-in-Furness, vice J. S. Morton, M.R.C.S., resigned.

Births, Marriages, and Deaths.

BIRTHS.

COOPER.—On the 11th inst., at 9, Henrietta-street, Cavendish-square, the Lady Agnes Cooper, of a daughter.

HARDY.—On the 12th inst., at Southville-park Villas, Dulwich, the wife of H. Nelson Hardy, F.R.C.S.Ed., of a daughter.

HARINGTON.—On the 8th inst., at Sherborne Lodge, Cheltenham, the wife of H. N. V. Harington, L.R.C.P.Ed., I.M.D., of a son.

HUMPHREYS.—On the 9th inst., at St. Leonards-on-Sea, the wife of J. H. Humphreys, M.D.Lond., prematurely, of a son (stillborn).

RAKE.—On the 11th ult., at Mucurapo, the wife of Beaven Neave Rake, M.D.Lond., Government Medical Officer, Trinidad, of a son.

MARRIAGES.

EMMETT—DELLER.—On the 7th inst., at the Parish Church, Paignton, Richard Emmett, M.R.C.S., L.R.C.P.Lond., to Georgie V. Deller, of Woodville, Paignton, South Devon.

JACKSON—PRIESTLEY.—On the 6th inst., at St. Mary Abbot's, Kensington, by the Rev. H. Webb-Peploe, M.A., Herbert Francis Vaughan Jackson, M.R.C.S., L.R.C.P.Lond., son of the late Sidney Vaughan Jackson, Esq., of Ballina, Co. Mayo, to Amy, only daughter of the late Robert Priestley, Esq.

WATSON—O'DONNELL.—On the 23rd March, at [illegible], N.W.P., India, Surgeon J. Watson, M.D., Medical Staff, Lucknow, to Florence, fourth daughter of J. W. O'Donnell, Esq., C.E.

DEATHS.

EDWARDS.—On the 11th inst., Mary Edwards, wife of Henry Edwards, Surgeon, Lichfield, only daughter of the late Godfrey Hi[illegible], of Lang[illegible] Hall, S[illegible], aged [illegible].

FIELD.—On the 12th inst., at 31, Lower Seymour-street, Portman-square, Hor[illegible], the infant daughter of George and Pauline Field, aged 16 months.

PANTALEONI.—On the [illegible] inst., at Rome, Il Commendatore D. Pantaleoni, M.D., Senator of the Kingdom of Italy.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

APPLETON & Co., New York.

Transactions of the New York State Medical Association for 1884. Vol. I. Edited by Austin Flint, jun., M.D. pp. 654.

BAILLIÈRE, TINDALL, & COX, London.

Manual of Chemistry. By W. Simon, Ph.D., M.D. pp. 411, with 16 Illustrations on Wood and 7 Coloured Plates.

BLAKISTON, SON, & Co., Philadelphia.

Surgical Delusions and Follies. By John B. Roberts, A.M., M.D. pp. 55.

CHURCHILL, J. & A., London.

A Treatise on Gout and Rheumatism and the Allied Affections. By Peter Hood, M.D. *Third Edition, Revised and Enlarged*, with a Chapter on Sleep. pp. 419.

Illustrations of Clinical Surgery. By Jonathan Hutchinson, F.R.S. Fascic. XVIII. 6*s.* 6*d.*

Clinical Lectures on Scrofulous Neck; by T. Clifford Allbutt, M.D. &c. And on the Surgery of Scrofulous Glands; by T. Pridgin Teale, M.B., F.R.C.S. pp. 32.

The Student's Guide to Medical Jurisprudence. By John Abercrombie, M.D.Cantab., M.R.C.P. pp. 387.

Lectures on Diseases and Injuries of the Ear. By W. B. Dalby, F.R.C.S., M.B.Cantab. Third Edition. pp. 260, with Illustrations.

Diagnosis and Surgical Treatment of Abdominal Tumours. By Sir Spencer Wells, Bart. pp. 216, with Illustrations.

HIGGINBOTHAM & Co., Madras.

Outlines of Medical Jurisprudence for Indian Criminal Courts. By J. D. B. Gribble, Madras Civil Service (retired). pp. 283.

HIRSCHWALD, A., Berlin.

Die Aetiologie der Chronischen Lungenschwindsucht vom Standpunkt der Klinischen Erfahrung. Von Dr. Herrmann Brehmer, sen. S. 517.

JOHNSTON, W. & A. K., Edinburgh.

Students' Atlas of Bones and Ligaments. By C. W. Cathcart, M.A., M.B., &c., and F. M. Caird, M.B., F.R.C.S.E. Thirty Plates, with descriptive Letter-press.

LEWIS, H. K., London.

On some Common Injuries to Limbs, their Treatment and After-treatment, including Bone-setting (so-called). By Edward Cotterell, M.R.C.S. &c. pp. 108, with Illustrations.

The Principles and Practice of Medicine. By *Rustomjee* Naserwanjee Khory, M.D. Brux. In 2 vols. Second Edition, Revised and much Enlarged. pp. 550–747.

LIPPINCOTT, Philadelphia.

Micro-Chemistry of Poisons, including their Physiological, Pathological, and Legal Relations. By T. G. Wormley, M.D., Ph.D., LL.D. Second Edition. *pp. 784, with 93 Illustrations on Steel.*

LONGMANS, GREEN, & Co., London.

Transactions of the Obstetrical Society of London. Vol. XXVI.

Works of Thomas Hill Green. Edited by R. L. Nettleship. Vol. I.: Philosophical Works. pp. 541.

An Introduction to Practical Organic Analysis. By G. E. R. Ellis. *pp.* 72.

MACMILLAN & Co., London.

A Text-book of Pharmacology, Therapeutics, and Materia Medica. By T. Lauder Brunton, M.D. &c. Adapted to the United States Pharmacopœia by F. H. Williams, M.D. Boston. pp. 1139, with Illustrations.

MACNIVEN & WALLACE, Edinburgh.

Health Lectures for the People. Fifth Series. pp. 155, Illustrated.

MORTON, J. P. & Co., Louisville, Kentucky.

Original Researches in Mineralogy and Chemistry. By J. Lawrance *Smith*. Edited by J. B. Marvin, B.S., M.D. Printed for Presentation only. pp. 630.

PENTLAND, YOUNG J., Edinburgh.

Text-book of General Botany. By Dr. W. J. Behrends. Translated from the Second German Edition. Revised by Patrick Geddes, F.R.S.E. pp. 374, with 408 Illustrations.

TINSLEY BROTHERS, London.

The Science of Change of Air. By D. S. Skinner, M.D. Brux. pp. 62.

The Colloquial Linguistic Faculty and its Physiological Groundwork: by W. H. Walshe, M.D. (Bale & Sons.)—Scottish Review, April.—The Osteology of Anica Calva: by R. W. Shufeldt.—British Gynæcological Journal, Part I. (Smith, Elder, & Co.)—Die Sterblichkeit der Stadt Budapest in den Jahren 1876–1881; von Josef Körösi.—The Position of the Medical Profession in regard to Certificates of Mental Unsoundness and Civil Incapacity; by T. S. Clouston, M.D.—Proposals for the Amendment of the Laws relating to Lunatics and Habitual Drunkards; by W. H. Kesteven, M.R.C.S.—Is Enteric Fever a Cattle Disease? by Jas. F. Allen, M.D. (Davis, Pietermaritzburg.)—Lunacy in many Lands: an Introduction to the Reports on the Lunatic Asylums of various Countries visited in 1882-83; by Dr. G. A. Tucker. (Presented to the Government of New South Wales.)—On Idiopathic Anæmia; by J. H. Musser, M.D., Philadelphia.—Deux Cas d'Opération de Trachélorrhaphie; par le Dr. Villet.—Simple Recipes for Sick-room Cookery: by Mrs. Buck, 2d.—Why not Eat Insects? by Vincent M. Holt. (Field & Tuer.)—Der Vegetarianismus; von Dr. G. Bunge.—Pneumonia in Young Children; by L. E. Holt, M.D.—Le Choléra; par le Dr. J. P. Bonnafont. ([illegible] et Fils.)—The Action of Alcohol on the Human System; by H. Harper, M.D.—The Kronenquelle at Obersalzbrunn; by Dr. C. [illegible].—Village Sanitation; by H. J. Alford, M.D.

Medical Diary for the ensuing Week.

Monday, May 18.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 a.m., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 p.m., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 p.m., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 p.m., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Tuesday, May 19.

Guy's Hospital.—Operations, 1.30 p.m., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 p.m.

St. Thomas's Hospital.—Ophthalmic Operations, 4 p.m.; Friday, 2 p.m.

Cancer Hospital, Brompton.—Operations, 2.30 p.m.; Saturday, 2.30 p.m.

Westminster Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 2.30 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Royal Institution.—3 p.m. Prof. Gamgee: Digestion and Nutrition.

Pathological Society of London.—8.30 p.m. Dr. Payne: Varicella Gangrenosa.—Mr. Pollard: A case of Pyæmia.—Dr. Heneage Gibbes: The Tubercle Bacillus in Animals.—Dr. Saundby: Atrophy of the Adrenals.—Dr. Seymour Taylor: A case of Addison's Disease.—Dr. Hadden: Atrophy of the Adrenals with Addison's Disease.—Dr. Wickham Legg: A case of Phosphorus Poisoning.—Dr. Thin: Sequel to a case of Rodent Ulcer previously reported.—Mr. Cullingworth: Impaction of a large Calculus in each Ureter.—Dr. Burnet: Primary Melanotic Sarcoma of the Liver (card).—Dr. Goodhart: (1) A case of Phosphorus Poisoning (card); (2) Specimen of Leprosy, for Dr. Beaven Rake of Trinidad (card).—Mr. Makins: Primary Sarcoma of the Tibia (card).—Dr. Sharkey: (1) Impaction of a Corn in the Œsophagus for Twenty Months (card); (2) Aneurysm of the Heart (card); (3) Multiple Epithelial Growths in the Œsophagus (card).—Mr. Poland: Sections of Epithelial Growths in Viscera after Epithelioma of the Tongue (card).—Dr. Chaffey: (1) Multiple Sarcoma in a Child (card); (2) Lympho-sarcoma of Bladder (card).—Mr. Hutchinson, jun.: Two cases of Epithelioma of the Hand (card).—Mr. Lane: (1) Bony Process from the Humerus (card); (2) Cases of Displacement of the Foot (card); (3) Fracture of Pelvis (card).—Mr. George Lawson: Extensive Secondary Glioma after Removal of both Eyes (card).—Dr. Barling: (1) Round-celled Sarcoma of Peroneus Longus (card); (2) Alveolar Sarcoma of Triceps (card).—Dr. Hale White: (1) Perforating Tubercular Ulceration of Intestine (card); (2) Grain of Corn causing Typhlitis and Intestinal Strangulation (card).—Dr. Turner: Aneurysm of Aorta communicating with Superior Vena Cava (card).—Mr. Shattock: Hernia into the Fossa Duodeno-jejunalis in a Child (card).—Dr. Hebb: Melanotic Sarcoma (card).—Dr. Dawtrey Drewitt: Persistent Branchial Fissure in a Child (living).

Wednesday, May 20.

National Orthopædic Hospital.—Operations, 10 a.m.

Middlesex Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 p.m.

St. Mary's Hospital.—Operations, 1.30 p.m. Skin Department: 9.30 a.m., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 p.m.

University College Hospital.—Operations, 2 p.m.; Saturday, 2 p.m. Skin Department: 1.45 p.m.; Saturday, 9.15 a.m.

Royal Free Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 3 to 4 p.m.

Thursday, May 21.

St. George's Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

North-West London Hospital.—Operations, 2.30 p.m.

Royal Institution.—3 p.m. Prof. C. Meymott Tidy: Poisons.

Harveian Society of London.—8.30 p.m. Mr. H. E. Juler: On the Use of the Ophthalmoscope in the Practice of Medicine.—Dr. Champneys: Some Points in the Diagnosis of Cervical Stenosis.

Friday, May 22.

St. George's Hospital.—Ophthalmic Operations, 1.30 p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 2 p.m.

Clinical Society of London.—8.30 p.m. Report of the Spina Bifida Committee.—Mr. George Lawson: A case of Successful Œsophagotomy for the Removal of Plate with Artificial Teeth accidentally swallowed.—Dr. Colcott Fox: Two cases of Raynaud's Disease.—Mr. William Anderson: A case of Villous Tumour of the Bladder.—Mr. Bernard Pitts: A case of Tumour of the Bladder, removal, cure.—Mr. Jessett: A case of Plastic Operation for Epithelioma of Lower Lip (living specimen).

Royal Institution.—9 p.m. Mr. W. H. Pollock: Garrick.

Saturday, May 23.

King's College Hospital.—Operations, 1 p.m.

Royal Free Hospital.—Operations, 2 p.m.

Middlesex Hospital.—Operations, 2 p.m.

Royal Institution.—3 p.m. Prof. Odling: Organic Septics and Antiseptics.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

The Lancet Office, May 14th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
May 8	29·95	W.	45	42	100	56	34	·12	Bright
,, 9	29·96	W.	50	45	100	59	40	·09	Bright
,, 10	29·95	W.	51	45	101	57	44	...	Cloudy
,, 11	30·11	N.	46	41	93	57	40	...	Cloudy
,, 12	30·19	N.E.	48	43	90	59	41	...	Hazy
,, 13	29·89	S.E.	50	44	91	59	40	...	Bright
,, 14	29·85	N.E.	49	44	91	55	40	...	Hazy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of The Lancet *to be addressed "To the Publisher."*

The late General Gordon on Medical Missions.

In the quarterly paper of the Edinburgh Medical Missionary Society, issued in May, is published a letter from the late General Gordon to the Rev. A. W. Schapira, Church Missionary Society missionary at Gaza, Palestine, in which he says that the fact of the inhabitants of cities like Gaza being fanatical is in a great measure due to their only knowing Europeans by repute, and expresses the opinion that by such establishments as hospitals a great moral effect is produced.

M.D.—We greatly prefer that clubs should pay 5*s.* or 6*s.* per member; but the sum named is not to be rejected.

CARDIAC MURMURS IN THORACIC ANEURYSMS.

To the Editor of The Lancet.

Sir,—Will any of your readers enlighten me as to the following. A female patient was admitted into this infirmary some time ago for cardiac disease. On admission, she complained of pain over the apex of the heart, with great palpitation. On stethoscopic examination, a loud diastolic murmur was heard over the apex region (that being the point of maximum intensity), by myself and several medical men. A few days back she had severe hæmoptysis, and gradually sank. On making a post-mortem examination, the following was revealed: A true aneurysm of the commencement of the arch of the aorta; there was very slight atheroma of the internal surface of the tumour; the cardiac valves were intact, and the heart and lungs normal. Now arises the query, Why this pain, hæmoptysis, and murmur? Was it conveyed along the wall of the ventricle and so intensified at the apex? Or was it due to the patency of the semilunar valves, produced through the agency of the aneurysm? We have it from authorities on the subject that murmurs are the exception, and not the rule, in thoracic aneurysms.

Having seen an almost similar example some time ago, and failing to find any mention of such statements as the above in any books on the subject, is my excuse for occupying your space.—Yours faithfully,

W. Gem.

City Infirmary, E., May 11th, 1885.

Medicus.—The question has been asked and answered more than once in our columns. (See The Lancet, June 16th, 1883, p. 1076.)

FEES FOR LUNACY CERTIFICATES.

To the Editor of The Lancet.

Sir,—A few months ago I was called upon to certify a lady of unsound mind whom I had attended for a mental affection some weeks before, and on sending my account for the certificate (£1 1*s.*) the other day was informed that on two previous occasions on which she had been certified her then medical attendants made no charge for the certificates, as they had been in previous attendance. Having never before heard such a fee disputed on this ground, I should be glad if some of your readers would kindly tell me the custom or rule in such cases.

I am, Sir, your obedient servant,

Lux.

May 8th, 1885.

THE ACTION OF IRON ON THE SYSTEM.

G. BUNGE, in the *Zeit. Physiol. Chem.*, describes experiments on the form in which iron exists in egg yolk. He is led to believe that food does not contain iron in inorganic combinations, but that it only exists in complex organic compounds which have been formed by the vital processes. It is absorbed and assimilated in this form, and then converted into hæmoglobin. This is, he is aware, apparently at variance with the observations of practical physicians. The apparent contradiction may, he thinks, be explained by the hypothesis that inorganic iron salts prevent the decomposition of the organic iron compounds in the intestinal canal.

Lex.—The legitimacy might be questioned, but its possibility could not be denied.

WE are unable to find room for *Dr. Gilbert's* letter in our present number.

MEDICAL MISSIONS AS FIRST AIDS TO CHRISTIANITY AMONGST THE HEATHEN.

To the Editor of THE LANCET.

SIR,—The annotation upon "Medical Missions" in your issue of Feb. 14th last stimulates me to give you an independent account of my personal observations of this kind of work in operation amongst the heathen natives of South Africa.

So far as I have been able to discover during my travels in this part of the world, and so far as medical mission work goes, there appear to be three classes of mission stations in South Africa:—1. Those which do not dabble with medicine. 2. Those which do dabble with medicine to an amusing degree. 3. Those which either have a resident medical officer or are within reach of medical aid. The missionaries I have spoken to in charge of stations coming under Class 1 give me as their reason for not prescribing for sick natives that they know nothing about medicine or drugs beyond castor-oil or Epsom salts. Those in charge of stations coming under Class 2 have informed me that they feel perfect confidence in their ability to undertake any medical or surgical case. At these stations I have seen well-stocked surgeries and surgical instruments, from vaginal speculums to midwifery forceps and tooth instruments. Those stations to which a medical officer is attached are very few and far between—in these parts at least; I am only personally acquainted with one; but his (the doctor's) presence is not felt by the surrounding natives, his duties being limited to teaching in the Young Men's College, and in professionally attending the staff of the particular mission connected with his sect or denomination. By paying, natives and Europeans can, however, see the doctor. Not many miles from this station there is another large mission station, with a free dispensary attached; but a lady has charge of the drug department and prescribes for the sick and the lame. But in not a single instance did I meet with, or hear of, a medical mission station, working as such, in connexion with or independently of any of the numerous mission stations scattered about in the interior or lower parts of Africa. In all directions all I could hear was that there were no funds for developing "medical mission" work. For nearly four years I had medical charge of a Government (colonial) dispensary and hospital, at which more than [illegible] sick were relieved annually (*vide* Blue Books, 1882-83-84). There was another medical establishment similar to the one under my own charge in the same territory; both were working an enormous amount of good, and both were closed upon the plea that there were no more funds left to carry on either the one or the other. During the existence of these dispensaries and hospitals, it was a rare thing to hear of witchcraft, "smelling-out," or other barbarous proceedings connected with disease or the sick and suffering; but, strange to state, within a few months of their being closed the native doctors could be met with everywhere, witchcraft again came into practice, and "eating-up" and "smelling-out" (practices connected with witchcraft) rapidly developed, with all their cruelties. However, the field is still open and "cut and dried" for medical mission work. This field is without an equal in South Africa; its benefits have already been tasted, and many long for its re-establishment, and it is a mighty weapon to use against heathenism in experienced hands.

The subject is far too long to discuss in your columns, and I am unable to do so at this time; but should any of your readers feel interested in medical mission work, the little personal experience I possess shall be placed at their disposal. However, I am strongly of opinion that medical mission work should be conducted independently of any ordinary mission station.—I am, Sir, yours truly,

S. CARTWRIGHT REED, M.D., J.P.

Douglas, Herbert, South Africa, March 31st, 1885.

Select.—There is much more laxity as to medical qualifications in the United States than here; but there is a marked tendency to improvement. We cannot speak definitely as to the employment of unqualified assistants.

USE OF THE TRICYCLE.

To the Editor of THE LANCET.

SIR,—May I ask through your columns whether in the experience of those members of the profession who use the tricycle a woman who is pregnant may ride that machine without any untoward results, and up to what period of pregnancy she may continue to ride with safety? The machine used is the "Quadrant," in which the power is gained by a vertical treadling action, so that the employment of the abdominal [illegible] is reduced to a minimum.—I am, Sir, yours faithfully,

May 12th, 1885. A MEMBER OF THE CYCLISTS' TOURING CLUB.

A COLUMBIAN OPINION ON INFANTILE CONVULSIONS.

DR. EVARISTO GARCIA mentions, in the *Revista Médica* of Bogotá, the case of an infant of a *few days* old with severe and persistent convulsions, both tonic and clonic, which he successfully treated with very frequent small doses of bromide of potassium combined with chloral, warm aromatic baths being administered three times a day. He says bromide and chloral are important and valuable drugs in the treatment of infantile diseases, children bearing relatively larger doses of chloral than adults without vomiting or inflammation of the intestinal mucous membrane; they are, too, more susceptible to the hypnotic effects of bromide of potassium, which produces a calm sleep without convulsions or congestions, which at such an age makes opium a difficult remedy to deal with. Although the bromide produces pruritus with a roseolous rash, it causes sleep and calms the patient.

Mr. G. E. Walker.—The paper is marked for insertion. The letter is, we fear, too lengthy for publication—at least at present.

Mr. Dutch.—We are not acquainted with the rules of the Association.

PERMANGANATE OF POTASH IN FUNCTIONAL AMENORRHŒA.

To the Editor of THE LANCET.

SIR,—Having read with much interest a leading article in your journal on the use of permanganate of potash in functional amenorrhœa, and several communications from gentlemen who had tried it, I determined to give the drug a trial on the first opportunity. It was not long before I had one, and with brilliant success.

Miss E. F——, aged seventeen, had menstruated regularly for two years; but about four months ago her catamenia suddenly stopped, owing probably to a moral emotion that she had at the time. Her general health was very satisfactory, and no signs of any organic disease or chlorosis were apparent; but during the periods at which menstruation would have taken place she suffered from headache, loss of appetite, nausea, heaviness in the lower extremities, and sometimes epistaxis. I ordered one grain of permanganate of potash to be taken three times daily in a little sugared water, with the usual hygienic precautions. After being under this treatment for a few days, menstruation reappeared at the proper time without any pain or other suffering.

Believe me, Sir, yours faithfully,

Malta, May 4th, 1885. F. BORG, M.D.

W. M., M.B.—The improvement in hearing seems to have been due to climatic influences, rather than to any surgical interference. This influence appears to have been relied on by those who recommended in turn high latitudes, New Zealand, and a dry climate. In the lining membrane of the middle ear the local change which is present in good hearing on the one hand, and in imperfect hearing on the other, is of so light a character that a variation in climate is frequently sufficient to effect even sudden changes.

Mr. A. G. Levy.—We can only refer our correspondent to our advertising columns.

TRICHLORACETIC ACID NOT A SOPORIFIC.

SOPORIFIC virtues have been ascribed to trichloracetic acid by various writers. L. Hermann shows, in Pflüger's *Archiv*, that it is destitute of any trace of this action, even when injected in large quantities. Its most characteristic action when injected in considerable quantity is the production of paralysis starting from the hinder extremities.

A Sheffield Medical Student.—We are inundated with such specimens as the one sent by our correspondent. The only remedy seems to be to make these *laches* known to the bodies whose diplomas are held by the delinquents.

COCAINE IN HAY FEVER.

To the Editor of THE LANCET.

SIR,—May I, through your columns, ask some of those who are now familiar with the use of cocaine whether they consider it probable that the application of a weak solution to the conjunctiva and the mucous membrane of the nose would, by virtue of its remarkable anæsthetic properties, be likely to prove of benefit to sufferers from hay fever? Before many days the intolerable miseries of this complaint will be again upon us; and if there is a likelihood of this suggestion proving serviceable, it behoves us to give the drug a trial, with the hope of adding another to its numerous virtues. I have no experience in the use of this valuable aid to the oculist, &c., and therefore am unable to say what would be the proportions of a solution strong enough to be of service without causing discomfort by affecting the accommodation of the eye. I am afraid expense would be an obstacle, for, on inquiry, I find that the present price of a 4 per cent. solution of hydrochlorate of cocaine is [illegible] an ounce.

I am, Sir, yours obediently,

Long Stratton, May 13th, 1885. C. A. O[illegible]

TREATMENT OF EPILEPSY BY SIMULO.

To the Editor of THE LANCET.

SIR,—Would any of your readers who have had experience of the treatment of epilepsy by simulo, a plant of the caper family (mentioned in THE LANCET of April 18th, page [illegible]), kindly give me the result, as I have a case in which all the ordinary remedies have failed, and I am anxious to try it.

I am, Sir, yours faithfully,

May 4th, 1885. M.R.C.S.Eng.

Relative Digestibility of Different Kinds of Flesh.

Messrs. R. H. Chittenden and G. W. Cummins, in the *American Chemical Journal*, describe attempts to obtain positive results as to the relative digestibility of the more common edible species of fish, comparing it with that of various kinds of meat. Artificial gastric juice, made with pepsin and hydrochloric acid, was employed, and the following relative figures obtained:—The digestibility of beef, 100; veal, 95; mutton, 92; chicken (light meat), 87; ditto (dark meat), 84; salmon, 92; mackerel, 86; haddock, 82; trout, 78; lobster (young), 88; ditto (large female), 79; ditto (large male), 69; fresh cod, 72. Generally the white flesh is more digestible than the dark, and raw meat than cooked. In all the above experiments, however, the flesh was steam-cooked.

T. M.—Certainly the practice is a dangerous one. Why do so? It is not only good policy, but simply just, to keep close to the letter and spirit of the law. Let the relieving officer be left to perform his proper function. It is not for a medical officer to take the initiative in the matter. No certificate should be signed, except on a magistrate's order, *in the class of cases referred to.*

L.R.C.P., M.R.C.S., 1860, has not enclosed his card.

"MEDICAL PRACTICE IN THE UNITED STATES."

To the Editor of The Lancet.

Sir,—In answer to the inquiry of "Medicus" in The Lancet of April 11th, I take the liberty to say that the qualifications for practice in the United States are regulated by each State. In the Eastern, Middle, and Southern States a diploma from a legally authorised medical school is required, the same to be registered with the clerk of the court. In a few States ten years' practice previous to the passage of any special medical law qualifies. The East affords the best field for practice. Our professional men in law and medicine in search of new locations gravitate westward. In proportion to the population, they stand about one to two between the East and West.—I am, Sir, yours truly,

U. W. Snyder, M.D.

Belmont, Pennsylvania, U.S.A., April 28th, 1885.

Sciatica.—Spencer Thomson's book, "Health Resorts of Britain," might assist our correspondent.

EXAMINATIONS IN THE VOLUNTEER SERVICE.

To the Editor of The Lancet.

Sir,—Will some of our volunteer surgeons who have already passed their examination kindly assist me by saying which are the best books or book to read for the examination in the volunteer service?

I am, Sir, yours truly,

Hull, May 11th, 1885. A Volunteer Surgeon.

Communications not noticed in our present number will receive attention in our next.

Communications, Letters, &c., have been received from—Dr. Dyce Duckworth, London; Dr. Braxton Hicks, London; Mr. H. Goude, London; Mr. Rushton Parker, Birmingham; Mr. W. Rivington, London; Mr. G. Berdoe, London; Dr. Bristowe, London; Dr. Emil Emond, Mont Dore; Dr. Maglioni, Montevideo; Professor Longmore, Netley; Dr. Brailey, London; Dr. Cruise, Dublin; Mr. Wilkinson; Dr. Paul Boerner, Berlin; Dr. Ketchen, Middlesbrough; Mr. A. G. Lacy; Mr. A. J. Harvey; Dr. Aikman, Guernsey; Mr. Balmanno Squire, London; Dr. G. D. Mackintosh, Uppingham; Mr. Buckler, Biarritz; Mr. G. C. Macdonald, London; Dr. H. J. Alford; Mr. G. V. Perez, London; Mr. Carmalt Jones, London; Mr. T. C. McCulloch, Hanwell; Mr. Gem, London; Mr. C. J. Bond, Leicester; Brigade-Surgeon McCarthy, London; Dr. Borg, Malta; Dr. Snyder, Belmont, Pa.; Mr. Barwell, London; Mr. McGell; Mrs. Higginbotham, Glasgow; Dr. Beaty, Indore; Mr. Comford, Cheltenham; Dr. Jay, Leamington; Mr. Laurie; Mr. Bates, New York; Mrs. Rawlins, Westgate-on-Sea; Dr. Cunningham, Pwllheli; Messrs. Evans and Co., London; Mr. Steadman, London; Messrs. Stevenson and Co., Bournemouth; Mr. Warrington, Wellington; Messrs. Allen and Hanburys, London; *Mr. Grimsley, St. Asaph*; Mr. Granger, Whitby; Mr. Flint, Westgate-on-Sea; Mr. Cornman, Bath; Lieutenant-General Radcliffe, Leamington; Mr. Rankine, Sunderland; Mrs. Bayly; Mr. Cuff, Scarborough; Mr. Gravatt, London; Mr. L. Dickinson, London; Dr. Fitzpatrick, London; Mr. Meadows, Hastings; Mr. G. E. Walker, Liverpool; *Mr. H. Lee, London*; *Dr. Suckling*, Birmingham; Dr. Berry, Keighley; Dr. Gordon Black, London; Mr. W. B. Owen, London; Mr. R. Jones, Liverpool; Mr. Brodribb, Hastings; Mr. Edmunds, Chesterfield; Mr. Campbell, London; Mr. Davies; Mr. Rose, Southport; Mr. Cartland, Windsor; Mr. Armstrong, Manchester; Mr. H. Kimpton, London; Messrs. Mackay, Edinburgh; Messrs. Griffin and Co., London; Mr. Birchall, Liverpool; Mr. Holtby, York; Mr. Wood, Mortlake; Mr. R. Freeman, London; Messrs. Partridge and Cooper, London; Mr. Herbert Page, London; Mr. Bremridge, London; Mr. T. E. Davies; Mr. Stanmore Bishop, Manchester; Mr. G. P. Field, London; Mr. H. Stott, Friern Barnet; Dr. C. A. Owens, Long Stratton; Dr. Wynn Westcott; Mr. Callander, London; Mr. Lewis, Wakefield; Messrs. Beal and Son, Brighton; Messrs. Reynolds and Branson, Leeds; Mr. Gledhill, Broughton; Mr. Tunmer, Harrogate; Mr. Heap, Hanley; Mr. Beswick, Chester; Messrs. Marlove and Co., Notts; Mr. Brown, Lichfield; Mr. Tubb, Bicester; Mr. Maythorn, Biggleswade; Mr. Evans, Oswestry; Mr. Keating, Manchester; A Subscriber; Lux; M.B., M.C.; Medicus, Eastbourne; T. M.; Lex; A Member of the Royal College of Physicians; E. P., Ottawa; An Old Indian; Ajax; Student; Medicus, Answorth.

Letters, *each with enclosure*, are also acknowledged from—Mr. White; Mr. Clark, Doncaster; Mr. Burgess, Manchester; Mr. Watson, Glasgow; Mr. Schluter, Hamburg; Mr. Tupholme; Mr. Macpherson, Middlesbrough; Mr. Mitchell, Holbeach; Mr. Wood, Burton-on-Trent; Mr. Kingzett, London; Dr. Colman, Yeovil; Dr. Waller, Peterboro'; Dr. Rake, Trinidad; Mr. Hodge, Ryde; Mr. Armstrong, Manchester; Mr. Morton, Horncastle; Mr. Norris, Weston-super-Mare; Dr. Hunter, Linlithgow; Messrs. Southall and Co., Birmingham; Mr. Lane, Northampton; Dr. Guisan, Cork; Miss Sullivan, Wolverhampton; Dr. Oliver, Harrogate; Mr. Curme, Childe Okeford; Messrs. Lumleys, London; Mr. Fulton, Toronto; *Dr. Austin*, Larne; Dr. Hunter, Notts; Mr. Perkins; Mr. O. Hanlon, Spennymoor; Mr. Pentland, Edinburgh; Mr. Draper, Huddersfield; Mr. Kirkby, Leeds; Mr. Craske, London; Mr. Richardson, Rhayader; Mr. Wetwan, Southwold; Mrs. Griffith, London; Mr. Hodgson, Peckham; Mr. Walker, Orick; Mr. Scott, Westray; Messrs. Reed and Co., Bristol; Dr. Kirk, Partick; Mr. Wells, London; Mr. Woodeson, Portsmouth; Mr. Lownds, Newcastle-on-Tyne; Mr. Marrett, Wisbeach; Lieutenant-Colonel Graham, Bristol; Mr. Pearson, Birmingham; Mr. Bryan, Little Hampton; Mr. Thomas, Poplar; Mr. Birch, Wandsworth; Mr. Rawlins, Westgate; Mr. Mitchell; Mr. Bedford, Sheffield; Mr. Waters, Bedford; Dr. Scofield, London; Mr. Price, Liverpool; Mr. Marsden, Edinburgh; Mrs. James, St. *John's-wood*; *Mr. Crocker, Patricroft*; Mr. Twyford, Hanley; Dr. Woakes, *London*; *Dr. Eberle, Thirsk*; *M.D., London*; Medicus, London; C. A., Brechin; Medicus, New Brompton; Matron, Liverpool; T. T., Liverpool; Medicus, Huddersfield; A., Liverpool; V. V., Camb.; F. C., Halifax; J. O. Y.; F. F., Leamington; D. S.; Y. A.; A., Newcastle-on-Tyne; M.D., Newcastle-on-Tyne; D. A. T.; Oculist; Alpha, Crones.

Hastings and St. Leonards News, Lincoln Gazette, Lincolnshire Chronicle, Guernsey Star, Fifeshire Journal, North Western Gazette, Sussex Daily News, Liverpool Courier, Keene's Bath Journal, &c., have been received.

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Clinical Lectures

ON

SCLERODERMA.

By H. RADCLIFFE CROCKER, M.D., M.R.C.P.,
PHYSICIAN TO THE SKIN DEPARTMENT OF UNIVERSITY COLLEGE HOSPITAL, PHYSICIAN TO THE EAST LONDON HOSPITAL FOR CHILDREN.

LECTURE II.

CIRCUMSCRIBED AND MIXED SCLERODERMA.

GENTLEMEN,—We will consider to-day the remaining forms of scleroderma. One is diffuse, and is always unsymmetrical; the other is circumscribed, and, though mostly unsymmetrical, is not invariably so. We will discuss first the circumscribed scleroderma, which is more often called morphœa. As this last name is intended to indicate, it generally consists of blotches or patches, but is sometimes in bands. I will relate to you some cases, and show you others, which will illustrate most of the points that make this form so remarkable and distinctive, that it was a long time before its relationship to the other kinds of scleroderma was perceived, and it is doubted even now by some high authorities, such as Kaposi, whether we ought not to consider it a separate disease. It affects the female sex in even greater proportion than the diffuse symmetrical form, and, like it, may affect both children and elderly people; but it is most frequently seen among young and middle-aged adults. Its clinical features appear in the following cases:—

Miss K——, aged thirty, noticed in June, 1877, a white patch with a "bump" in the nape of the neck about three inches long and about an inch and a quarter in width; she does not think that the area of the patch increased up to the time that I saw her in March, 1878, but it projected more; she suffered from frequent "bilious attacks" attended with giddiness, pain, and weight in the chest, with vomiting and diarrhœa, but no headache. She knew of no cause for the lesion, and can give no account of its development. When I saw the patch it measured four inches and a half by one and five-eighths of an inch, but the upper half was much narrower than the lower; it was of a dead-white hue, with marked thickening in the centre and upper part, but at the edge the thickening was only slight, and faded off into the healthy skin, and there was no vascular zone round the patch. On the surface were shallow furrows radiating from the centre towards the circumference—in short, a puckering of the affected integument as if it had contracted; it could only be pinched up with difficulty on account of the thickening, but it was not adherent to the subjacent tissues. The skin felt hard, like rather stiff leather, between the fingers, and at the extreme edge white dots were seen surrounded by healthy skin. The patch was in the middle line, but more on the left side than the right. She was under treatment for some time, and general tonics were given internally and locally. An attempt at continuous galvanic action was made by fastening on the patch a plate of zinc and copper, with a piece of lint wet with salt solution between them. This did no good; indeed, the thickening increased somewhat, and produced more corrugation of the patch by the central contraction; and soon after I lost sight of her for a time, but three years later I saw her again, and she told me that about a year and a half after I had last seen her she had an attack of typhoid fever, and that after that the patch gradually disappeared; its going and coming appeared therefore equally mysterious, but it is not improbable that the friction of the dress at the nape was a determining cause for its position, and that the prolonged horizontal posture from the typhoid fever was the means of sending more blood to the part, and so led to recovery. The position of this patch in the middle line must be borne in mind, as it contrasts with most others which are more laterally placed, and it cannot be ascribed to a special nerve area. The thickening was greater than we usually find, but is present also in another of our cases. Finally, the complete disappearance of the disease in between two or three years after its first onset is to be remembered as probably part of the usual history of such cases if they could always be followed up. Here is another example of this disappearance whilst under observation in which the patches were multiple:—

Joyce M——, aged thirty-eight. Six months before her application to the hospital she noticed white patches appearing on the right thigh and leg without any apparent cause; the top one was and is attended with itching, but there is no symptom with the others. She knows of no cause for them; her general health is not very good; she has several patches of lupus erythematosus on her scalp and face, most of them cicatrised, the result of treatment, and there is some suspicion of marital syphilis. The morphœa patches are thus arranged: one the size of the end of the finger is situated rather to the inner side of the lower third of the thigh; another below this an inch and a half by three-quarters of an inch, with its greater diameter placed transversely; at the back of the thigh, just above the calf, is another patch an inch and a quarter by three-quarters of an inch; still lower on the inner side of the leg, over the tibia, is a slight yellowish discolouration, not clearly defined, and scarcely diagnosable except for the presence of the others; a little lower is another cicatricial-looking patch, which has still less of the typical morphœa aspect. The upper, larger patch has a slight violet zone round it composed of dilated bloodvessels; the others lack this, but the upper patches are of a yellowish-white colour, hard to the touch, but capable of being pinched up, and feeling like a piece of stiff leather. In the course of the year the patches began to disappear, the top patch and the one below the knee becoming thinner and less discoloured, and six months later the patch on the calf disappeared, but the patient ceased to attend before they were all completely gone.

In the following case the nerve distribution of the patches can be distinctly traced:—

Sarah J——, aged seventeen, attended at the East London Hospital for Women and Children on Dec. 8th, having been sent to me by my friend and colleague, Dr. Donkin. She was pale and subject to fainting, remaining insensible for an hour sometimes, and in some of these "faints" had fallen downstairs. She suffers from frequent headache and pain on the left side; has menstruated, but never regularly; never had rheumatic fever; heart normal. About four years ago she noticed some spots on the flexor surface of the left wrist; several appeared about the same time, extending about half-way up the forearm. They were not more than one-eighth of an inch in diameter, and they have gradually got larger by running one into another, and fresh places are appearing. Most of the patches are now raised above the normal skin, with a sharply defined border, but no vascularity around or in the neighbourhood, and the natural lines of the skin are unaltered. The patches can be pinched up as a whole, but not any part of them, and there is a very decided thickening; two or three are slightly pigmented of a fawn colour, but the rest are quite white. There is slightly less sensibility on the patches than round about them, and the patient thinks there is less strength in the affected arm. The patches are distributed as follows: In the right second intercostal space and towards its inner border, an inch to the right of the median line, is a patch half an inch in diameter; in the second left space on the same level, but two inches from the median line, is another; on the inner side of this in the third space is another, and in the same space are two spots three-quarters of an inch in diameter apparently commencing, the skin looking a little yellow and feeling a little thickened. In the axilla at about the second and third spaces is a group, some of which are a quarter of an inch, others are irregular and an inch and a half or more in diameter, running down rather to the back of the arm; towards the inner condyle is an almost continuous chain of patches; and in the same direction, but rather more anteriorly, is another less marked series, beginning about two inches below the inner condyle and reaching down the forearm for about two-thirds. There are a few directly posterior on the upper arm for about three inches; another series, fewer and less prominent, begins three inches below the acromial process and goes straight down to a point two inches above and to the front of the outer condyle; at this point there is a patch an inch by three-quarters of an inch, and the line is continued on to the upper two-fifths of the forearm; between the outer and inner of these two lines is a third, beginning with small ones a quarter of an inch in diameter, in the middle of the upper arm to the elbow, and from there to an inch above the hand; the lower patches are larger, irregular, and pigmented. The vaccination cicatrices are well-marked, with no morphœa in them. The extreme limits of the size of the patches is a quarter of an inch and two inches. In this case you have to observe that the patient was of a neurotic temperament, that the patches were very numerous, that the first ones came in a group and that they have very considerably increased in size from the date of their first appearance, when they were only an eighth of an inch across; then there was slight pigmentation in some of the patches, but this feature is much more developed in a case that I will relate presently. The arrangement of the patches in the intercostal spaces and in lines down the limbs affords a good illustration of nerve influence in the distribution of the disease—a condition not very uncommon as regards the fifth nerve, but less frequently seen, or less easily recognised, in other parts of the body. The marked elevation of the lesions and the absence of the usual vascular zone are also noteworthy features.

Our next case exemplifies fifth nerve distribution:—

Ellen T——, aged ten years, was sent to me by a doctor from Wirksworth. Three months previously a whitish patch appeared on the forehead just to the right of the middle line at the commencement of the hairy scalp; it is now spreading downwards on to the forehead, and measures an inch and a half by half an inch; the upper and lower parts, which are the more recent, are pearly white and thin, while the middle two-thirds are yellowish and thickened, and the skin cannot be pinched up in these parts. The skin is pink for about half an inch beyond the patch, but there is no distinct zone of vessels. On the scalp corresponding to the apex of the occipital bone, and quite in the middle line, another patch is coming an inch by half an inch, oval and slightly yellowish, but the skin is not thickened. In the centre of the cheek is an irregular patch, about an inch and a quarter by two-thirds of an inch, where the skin is very slightly paler than the surrounding parts, but there is no alteration to the touch or when pinched up. The mother says it is more conspicuous sometimes, when the rest of the cheek is red; now it is only just perceptible, and would have escaped notice if attention had not been drawn to it. With a lens the skin is seen to be slightly smoother than the healthy skin. No assignable cause for the patches is discoverable. The patient has never been strong, and there has been no definite illness except three convulsions at long intervals between the ages of three and five years; and there have been none since. She often complains of her legs aching, and easily gets out of breath, but the heart and lungs are healthy. She was only seen once. This distribution in the course of the fifth nerve is much more striking in some cases, several patches not unfrequently lying exactly along the course of distribution of its branches, the domain of the supra-orbital branch being especially frequently favoured. A patch or band will sometimes divide the forehead and anterior half of the scalp exactly in the middle line, as if by the cicatrix of a sword-cut. I will show you the portrait of such a case presently.

The next case exemplifies rapid evolution:—

William M——, aged eleven years, came to the East London Hospital for Children on June 18th, 1877. A month previously a patch the size of half a crown appeared close to the spine on the right side below the level of the angle of the scapula; a few days later a smaller one appeared in the right interscapular region; the large patch began with itching and tingling; and the week before he came to the hospital he complained of pain in it; the pain was constant but with exacerbations. The large patch is the size of the palm with ill-defined edges, so that the patch gradually merges into the surrounding skin, which is naturally dark; the patch is white and looks like a cicatrix, with brown patches *the size of a florin on it; the skin over it has a* leathery feel, and is thicker than the surrounding parts. In the lumbar region over the spine is a white atrophic spot the size of a pea, depressed below the other skin. There is a streaked patch on the left of the spine glistening and slightly scaly, apparently the commencement of another patch. The boy looks perfectly well and ruddy, and has had no previous illness, except measles; he only attended for a short time and could not be afterwards traced. In addition to the rapid evolution the association of a white atrophic spot with the morphœa is interesting here. This has been previously observed, and is not very surprising if my theory of the pathology of morphœa is correct.

The next case is of special interest, because its course has been watched for several years, so that the evolution of the disease could in great part be traced; and through the good nature of the patient the morbid anatomy has been made out for the first time, both in the early and later stages.

L——, aged thirty-nine, widow, first attended at the East London Hospital for Women and Children on March 16th, 1878. Eight months previously she noticed a white patch the size of a threepenny-piece just above the right clavicle. When first seen by myself it had increased to an oval patch an inch and three-quarters by three-quarters of an inch, consisting of two parts, a white slightly thickened parchment-like portion and a thinner and pinkish patchy-looking part, which surrounds three-quarters of the white part. Beyond this large patch is a white atrophic spot the size of a millet seed. On December 1st, 1877, the patch is described as about an inch to the left of the sterno-clavicular region in the same position. Further observation showed the mode of development of the left patch was as follows:—Several small pearly white and slightly depressed spots about one-sixteenth of an inch across developed in groups, the surface round being pinker than the rest of the skin; these evidently atrophic spots enlarged, and subsequently coalesced into patches of variable size. The centre of the spot is smooth, but the border is slightly puckered into radiating lines. In the neighbourhood of these spots the skin is slightly marked with vessels, but when the patch gets larger, dilatation of the vessels round the patch will probably form a pink or violet zone. The older and larger patch increased in size in a similar way, small atrophic spots first forming, enlarging, and then coalescing with the large patch. On December 31st it was noted that both patches had increased since she was last seen in the spring; the right one had grown in all directions, especially at the anterior and posterior ends, and there was one spot on the right border of the sternum. On the left side the spots had increased in size, many being a quarter of an inch or more, but there was no large patch then; all the new patches were of a much more opaque white than before, especially the posterior end of the large patch. There is a peculiar irritation present. The older and larger patch, which had a very irregular outline, measured four inches by two and a half in its greater diameter. The patient was good enough to allow me to excise a portion of the patch some time previously for microscopic examination, and when the patch was much smaller the whole of it was removed, but it recurred, and it would be impossible to say that any had been taken away from its present aspect (1881). In order to ascertain whether the sweat glands were interfered with, pilocarpine was injected under the skin and sweating was produced all round the patch profusely, and the whole of the body was slightly moist, but the patch itself remained quite dry. The patches are always hairless, and the natural wrinkles are obliterated. She is of a nervous, worrying temperament naturally, and this is aggravated by a poor digestion and family troubles, in the shape of an idiot child and the worry of a shop, of which she is proprietress, in a very poor neighbourhood.—Jan. 19th, 1885: The large patch has not increased in size since I saw her four years ago, but its *texture has altered*, and the upper and older three-quarters are evidently recovering to a great extent. The skin is very thin and of various shades, from bright-red to pink-red; parts of it are well-defined from the rest, and the colour is almost entirely due to dilated vessels. The lower three-quarters is still white and parchment-like, *in fact, retains the morphœa aspect*, but is not uniform. At the most extreme part of the posterior border is a thickened area, about half an inch square, of apparently ordinary keloid, on the site where a piece of skin was removed some years ago. Nearer the median line of the neck than the large patch is an irregular group of six morphœa spots, one-sixteenth to a quarter of an inch in diameter. On the left side the corresponding patch has never developed, as it once apparently promised to do; but there is still only an irregular group of white indurated skin patches, half by an eighth of an inch, and arranged in two parallel lines, some half dozen in all. The skin on which they are placed is still somewhat pinker than the rest, but there is no well-defined zone either here or in the larger patch now.

I have no case of my own to offer you in which the disease is in bands, but there is a very good instance of it reported in the *British Medical Journal* of June 7th, 1884, by Mr. Simpson of Lincoln, in which, as a result of, or at all events consecutive to, an injury to the knee of a girl of between two and three years, the skin over the patch became hard, and the induration spread upwards and downwards until it formed a band *along the inner and anterior aspect* of the limb three inches broad at the groin, and an inch at the dorsum of the foot. The skin was pallid, glossy, and irregularly mottled, with yellowish-brown spots, the borders were irregular and of a pink hue, and the contraction of the indurated skin bent the foot up to an angle of thirty degrees with the leg. The case appeared to be getting better when last seen, about four years from the beginning of the disease.

Mr. Hutchinson's case of Louisa O——, aged five years, reported in his Lecture on this subject, is also in point. Some months after having complained that her foot hurt her, a white patch was noticed in front of the instep, and after that spread rapidly, and when seen a year later there was a "long irregular tract extending from the dorsal surface of the two inner toes along the middle of the dorsum of the foot over the front of the instep and up the front of the leg, *and then, diverging* to the outer side of the knee, passed up the outer side of the thigh as far as the middle."

In both these cases an injury seemed to be the exciting factor, and this is corroborated by others. Thus, in Gillette's case[1] the affection followed a blister; in a case of Dr. Hilton Fagge[2] patches were symmetrically *placed in the position* over which the garters were worn; and these cases support my suggestion that a patch on the neck in the first case related *might be due to the friction* of the dress. No doubt there must be a predisposition on the part of the patient; but this is true also for the cases with a definite nerve distribution; for though the nervous system can determine the occurrence and the position of an eruption, and perhaps its extent and severity to some degree, it depends on the individual attacked what kind of lesion will ensue.

A case of Mr. Streatfeild's bears upon this.[3] A man, aged forty-five, had *morphœa confined* to the area of the left fifth nerve, affecting the skin and subcutaneous structures, and in addition he had exostoses of the lower jaw and hard palate of the same side; he had also ulceration of the lower part of the cornea, but this appeared to be due to the hard edge of the sclerosed lid. Another favourite position for morphœa bands is on the breast, perhaps from the friction from the edge of the stays. And here I would observe that the patches are more *superficial than* the bands, and usually affect the skin alone. Do not imagine that I wish to push the theory of injury to the exclusion of nervous influence. There are *so many* cases where the patches are obviously in the course of nerves, that we must assume they have an important influence in this *arrangement*, and probably in the production of this disease. At the same time, I think that local irritation or injury is the probable exciting cause of a certain number of instances, and local causes should therefore be always sought for; while there are a large number of cases for which we can give no satisfactory explanation unless we assume that there is a local vaso-motor or trophic defect.

(To be concluded.)

ON THE

SIGNIFICANCE OF A PECULIAR MURMUR IN RELATION TO THE DIAGNOSIS OF INTRA-THORACIC DISEASES.

BY J. S. BRISTOWE, M.D. LOND.

(Concluded from p. 881.)

CASE 3. *Disease of heart and large vessels at base, with probable communication between an artery and vein.*—Daniel B——, a letter-carrier, thirty-one years of age, came under my care on Jan. 15th, 1885. His health had been good up to about five years ago; he had never had rheumatism or syphilis. About the time just stated he began to suffer from shortness of breath, and this had continued to increase, but it had not until recently prevented him from walking many miles daily in the performance of his duties in a suburban district. On Jan. 1st he complained of feeling cold and shivering, of cough, and of fluttering at the heart; his breath became shorter; and he took to his bed.

The patient is a spare, pale, but fairly healthy-looking man, complaining of pain in the cardiac region, cough, and dyspnœa. Tongue slightly coated; skin cool and moist; temperature normal. On examining the chest, the lungs, excepting for the presence of a little rhonchus, appear to be healthy. Respiration 30. The præcordial dulness is of normal area. The heart's apex beats about half an inch below the nipple and a little to its inner side, and attending each beat there is a fairly well-marked thrill; there is also slight pulsation visible at the inner extremity of the left second interspace, and here also a slight systolic thrill is perceptible. A murmur is audible over the cardiac area and the position of the large vessels; this is loudest and most distinct *over the situation* of the pulmonic valves and pulmonary artery—or, in other words, over the cartilage of the left third rib and corresponding portion of the second interspace. In this region one can hear the first and second sounds of the heart, the latter being somewhat scratchy in quality; but, additionally, there is a loud blowing murmur, beginning with the systolic sound, continued, without obvious change, throughout the whole of *the systolic period, and with some modification* of character (reminding one of a venous hum) through the second sound into the diastolic period, during which it dies away. The murmur is audible over the aortic area and at the apex; but in these situations (as, indeed over the greater part of the cardiac area) the systolic portion of the murmur is alone distinguishable. The murmur is also to be heard distinctly over the whole of the manubrium *of the* sternum, and behind over the apex of the left lung, and in the course of the aorta as low down as the middle of the scapula. The second sound is louder and more scratchy to the right of the sternum than to the left. It is not quite clear whether the murmur at the apex is wholly conducted from the base, or is in part a mitral systolic murmur. The action of the heart is regular but quick (110); the pulses at the wrists are equal, and, as shown by the sphygmograph, of quite normal character. There is no undue pulsation in the vessels of the neck, and no enlargement of veins about the neck or in the thoracic walls. Pupils equal; voice normal. Abdominal organs and kidneys healthy. No anasarca; no enlargement of the ends of the fingers.

The patient was kept in bed and examined carefully from time to time; further examination confirming the general *correctness of the description* given. *But* a few additional phenomena were observed. Among these, the fact that the right pupil was usually somewhat larger than the left; the fact that occasionally he presented slight puffiness of the backs of the hands, more especially of the back of the left hand (this it appeared had often been observed before admission); and the fact that he suffered at times from some aching pain in the region of the heart and left axilla. So long as the patient *remained in* the hospital he continued fairly comfortable and looked fairly well. But he was occasionally kept awake by the thoracic pain and cough, which, however, were never very severe, and improved. There was some difference of opinion with respect to the intra-thoracic murmur. Some of those who examined the patient held that there was a double basic murmur. For my own part, I never saw reason to modify the description of it given above, and I may add that Dr. Gee on one occasion examined the man with me and came to the same conclusion that I had done.

The patient was discharged improved in health, but unchanged as regards the physical signs of disease, on Feb. 24th, 1885.

What is the matter with the patient? My present experience would lead me to believe that he has an intra-thoracic growth of the same kind as the growths in my first case, or that he has some communication between an artery and a vein, or the equivalent of a vein, as in my second case. I do not believe that he has a tumour, for his symptoms have been coming on for years; they are very slowly progressive at the present time, and there are no enlarged glands in the neck, or tumours there or elsewhere, to confirm the diagnosis of intra-thoracic new growth. On the other hand, it does not seem very likely that any communication exists between the aorta and the vena cava or one of the innominate veins, partly because the murmur is loudest at the left second interspace, which is far removed from the normal position of either of these veins, partly because of the total absence of dilated or pulsating veins in the neck, of distended veins in the thoracic walls or arms, and of œdema and congestion of the head and neck. The absolutely healthy quality of the pulse, combined with the situation in which the murmur appears to arise, might suggest disease of the pulmonary artery, and communication between this and some neighbouring vein, such as one of the pulmonary veins. But primary disease of the trunk of the pulmonary artery is excessively rare, and communication between such a diseased artery and a vein is of too improbable occurrence to deserve serious consideration. The most likely explanation seems to be that the patient has an aneurysm of one of the sinuses of Valsalva or of the aorta in the immediate neighbourhood, and that a small communication has become established between this and either the pulmonary artery or the left auricle. The former of these two incidents is the more common and the less serious, and for these reasons the more likely. I may call your attention to a very valuable report on the subject of "Aneurysm of the Aorta opening into the Cavities of the Heart or large Vessels" published by the late Dr. Peacock in vol. xix. of the Transactions of the Pathological Society, which may be usefully studied in connexion with this paper.

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[1] [illegible]

[2] [illegible]

[3] [illegible]

I add a fourth case, not because it has any relation to the title of my paper; but because it closely resembles in almost all other points the case of Susannah F——. It presents also features of independent interest.

Case 4. *Large aneurysm of ascending aortic arch; compression and obliteration of junction of both innominate veins with cava; great œdema of head and neck and upper part of trunk; suppuration among pectoral muscles, of middle lobe of right lung, and of tissue between œsophagus and left bronchus perforating both tubes; death; necropsy.*—Henry C——, aged forty-five, was admitted under my care on July 7th, 1857. He had had good health up to seven months previously, when he first felt a dull heavy pain in the chest; this gradually increased, and became accompanied by cough with pain in the head; then difficulty of breathing came on, with inability to lie down, especially on the back or right side. Later on he noticed swelling of the neck and upper part of the chest.

On admission he was suffering from orthopnœa, with an occasional troublesome cough, and intra-thoracic pain. His head and neck and upper extremities were much swollen and congested; and the veins in the neck, as well as those in the upper part of the walls of the chest, were distended. The lower part of the trunk and the legs were wholly free from œdema. The heart's action and sounds were healthy. There was some prominence of the upper part of the sternum and adjoining ribs; and there was an area of dulness, several inches in diameter, having the manubrium for its centre. There was no pulsation here; neither was any murmur detectable. No tumours to be felt in the neck, no inequality of the radial pulses, nor any signs of pulmonary disease.

The patient varied a little from day to day as regards his dyspnœa and pain; but in the main he gradually got worse. The congestion and œdema of his head and neck, upper part of the chest and arms, increased considerably, until his aspect was shocking to look at. And towards the close of his life the œdema descended, and involved not only the abdominal walls, but the legs. His dyspnœa was always considerable, and at times distressing. He was unable to lie down, and generally passed his days and nights sitting across a chair with his face to the back and his head resting on his arms, which were supported on the back of the chair. In this position he dozed from time to time. The pain continued more or less severe. There was nothing specially to be noticed as regards the state of his digestive organs. He took food fairly well, and his bowels were pretty regular. There was nothing abnormal in the urine. He died on July 23rd, sitting on the corner of his bed.

Necropsy.—Extreme anasarca of head and neck and front of chest, slight anasarca of feet. The connective tissue and muscles of the front of the chest were highly œdematous, and the muscles occupying the left mammary region were hardened and infiltrated with pus. The sternum was strongly adherent, especially above, to a nearly globular intra-thoracic tumour. This, which measured nearly eight inches in diameter, extended from the top of the sternum above to the cartilages of the fifth rib below, and from an inch outside the junction of the osseous ribs and cartilages on the one side to the corresponding situation on the opposite. The heart was pushed downwards and to the left, and the lungs were displaced laterally and adherent to the tumour. The pleuræ contained about a pint of serum each. A layer of recent lymph lined the anterior half of the left pleura. The lungs were small. The middle lobe of the right was infiltrated with pus, the lower lobe was collapsed. The rest of the right lung and the whole of the left were crepitant. The pericardium was universally and firmly adherent to the heart by old adhesions, which were abundant, œdematous, and consequently very thick. The heart was of ordinary size, if anything rather small, and its valves were healthy. Pharynx and œsophagus for the most part healthy. But the anterior wall of the latter presented a longitudinal slit or ulcer about an inch long, which communicated with a sloughy cavity the size of an almond between it and the left bronchus. Three or four of the cartilaginous rings of this bronchus were partially destroyed, and their denuded extremities hung into the cavity. The mucous membrane of this tube was perforated at two or three points. There was nothing to show how this small abscess-cavity had arisen; but it was evidently the cause of both the œsophageal and bronchial ulceration. Larynx and trachea and (with the above exception) bronchial tubes healthy. The tumour, which extended back almost to the spine, was an aneurysm, with a thick, tough, fibroid capsule, and nearly filled with laminated coagulum. This latter measured from an inch to an inch and a half in thickness. The rest of the cavity was occupied by more recent clot. The aneurysm sprang from the front and sides of the ascending aortic arch, from just above the valves below to the origin of the innominate artery above. The upper and lower margins of the orifice of communication were thick and rounded. The lateral margins were lost in the arterial walls. No part of the aneurysm had any direct connexion with any of the suppurating regions before described. The transverse arch of the aorta was somewhat dilated; and the whole length of the vessel was studded with patches of atheroma. The right vena innominata was distended, and completely blocked up by adherent, decolourised, laminated coagulum; and coagula gradually assuming the characters of recent clot extended to a considerable distance into the veins opening into it. The same was the case with the left innominate and its branches. But this innominate was thicker walled, and the clot filling it was more adherent and denser. Both veins stood up almost perpendicularly from the aneurysm, at a considerable distance from one another, and the proximal parts of both were lost in the aneurysm, and could not be followed either upon or through its walls. The superior cava could be traced upwards from the heart for a distance of two inches, where it gradually blended with the walls of the aneurysm and was lost in them. The upper end was separated by a considerable interval from the lower end of the right innominate, and by four or five inches from the lower end of the left. The abdominal viscera were all healthy.

CASES OF LITHOTOMY IN THE ADULT,

WITH REMARKS.

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(Concluded from page 856.)

Case 2. *Twenty-six small calculi removed by the lateral operation from a man sixty-four years of age; recovery.*—Henry W——, sixty-four, was admitted into the London Hospital under Dr. Langdon Down on March 14th, 1873, and remained on the medical side of the house till May 4th, when he was transferred to my care. The diagnosis card bore the record, "granular kidney, bronchitis, and cystitis." The urine had been alkaline at first, later slightly acid; sp. gr. 1025, and contained mucus and one-eighth of albumen. The patient had been troubled with a cough for many years, worse in the winter than in the summer. He had never had hæmoptysis. He said he had stricture for two or three years. Nevertheless, a full-sized catheter passed easily. He suffered from great pain in the back, preventing sleep.

On May 22nd, having found that there were calculi in the bladder, I passed a lithotrite scoop, seized a calculus, brought away a portion, and tested it. The muroxide test showed that it contained lithic acid. Although the patient had no shivering fit afterwards or other bad symptom, he certainly did not wear the aspect of a case favourable for either lithotomy or lithotrity. He appeared to be an old broken-down man, with bronchitic and emphysematous lungs and damaged kidneys; but I thought he would have the best prospect of recovery if I removed the calculi as speedily as possible. Accordingly, on June 9th I performed the lateral operation on the principle of the median, cutting into the urethra as far as the apex of the prostate, and slightly into the gland, introducing a director, withdrawing the staff and then insinuating my finger into the bladder. I say into the bladder, but in reality I could scarcely reach further than the vesical orifice, owing to the depth of the organ and the great enlargement of the prostatic lobes. In performing the operation I used a curved catheter staff, made for me by Messrs. Krohne and Sesemann, after the model of the ordinary rectangular catheter staff. The calculi were extracted one by one, twenty-six in all. The largest were about the size of marbles, of a buff colour, and marked with facets. There was tolerably free hæmorrhage, chiefly venous, due to congestion of the parts. A tube with a sponge was introduced. A little bleeding following the operation was easily stopped by the pressure of a couple of sponges.

June 10th.—A better night than for some time; pain at meatus, which used to be severe, nearly gone; tongue coated; much flatulence; sickness; thirst. Temperature 99·8°; pulse 120; respiration 30; taken no food; all the water comes through the tube; anxious expresssion; no pain; scrotum and perineum of a blackish colour from blood extravasation.—11th: Very low; passed a very bad night; erysipelas of nose appearing; tongue coated; pulse feeble; takes no food; tube removed; an indiarubber catheter inserted quite easily. Temperature 102°.—12th: Catheter came out and could not be repassed; no vomiting; in much the same condition; takes milk; urine passes through the wound.—13th: Great pain at times; takes egg, milk, and brandy; erysipelas spreading; nose swollen. I passed a catheter into the bladder, and, having drawn off 20 oz. of very offensive purulent urine, washed out the bladder.—14th: Better; less pain; more relish for food; urine drawn off clearer; bladder washed out.—16th: Rather better; takes more nourishment; erysilepas disappearing.—17th: Better; less pain; erysipelas gone.—19th: Better; takes food fairly; half an ounce of very fetid pus drawn off with the catheter; subsequently the urine drawn was clearer.—20th: Much better; takes plenty of nourishment; two teaspoonfuls of urine passed through the urethra. From this time he was convalescent; the wound healed slowly; the bladder was regularly washed out, and at the end of some weeks he left the hospital, cured so far as the lithotomy was concerned. The calculi are in the museum of the College of Surgeons. Like the others, they were analysed by Mr. Taylor; they consist of uric acid upon a minute nucleus of oxalate of lime. The outer surface of the calculi is coated with a thin layer of urate of ammonia.

Remarks.—Lithotomy, as performed in the present case, cannot be regarded as in itself a dangerous operation. With a very limited incision of the prostate, with only slight dilatation of the gland, and without subsequent contusion in the extraction of the calculi, lithotomy is reduced nearly to a simple incision in the urethra, a procedure which can scarcely have a higher rate of mortality than the "catheter fever," which has been stated on high authority to be fatal in 4 or 5 per cent. of the cases. One of the main features of the case was the marked amendment which followed the withdrawal, on the fourth day after the operation, of a pint of purulent and offensive urine and washing out the bladder. The absence of interference with the neck of the bladder left the retentive power of the viscus unimpaired, and the urine accumulating mixed with vesical mucus and pus, and therefore readily decomposing, created irritation, and probably promoted the spread of the facial erysipelas. Two days after the irrigation of the bladder commenced the erysipelas had gone, and the patient's condition had greatly improved. The foregoing two cases are the only instances of multiple calculi in the adult for which I have performed lithotomy. About this period I attended a case of calculous affection recommended to me by my colleague Dr. Meymott Tidy. The patient was a man seventy-six years of age, who could not pass his urine on account of atony of the bladder accompanying the presence of several calculi in the organ. He was in fairly good condition and much better to all appearance than Henry W——, not being confined to bed or suffering from any serious concomitant disorder. The urine was free from albumen. I gave my opinion in favour of an operation, but very naturally before he decided the patient desired to have a consultation, and Sir William Fergusson saw him with Dr. Tidy and myself. Sir William soon satisfied himself as to the presence of multiple calculi, and after he had returned home wrote to me to the effect that he did not consider the stones as the cause of the atony of the bladder, and advised me not to press the patient to consent to an operation. In deference to Sir William's high authority this negative course was pursued. The patient lived four months longer, regaining some power over his bladder before his decease. No post-mortem was made, the patient being a Hebrew. My impression was that he would have been more comfortable and, provided that he had survived the operation (and I see no reason why he should have succumbed), have had a better prospect of prolonging his life if the calculi had been removed. But this was only an impression which I did not feel justified in acting upon in opposition to the view of a surgeon possessing so extended an experience as Sir William Fergusson. This, however, I think I may say, that if I myself at the same age were suffering constant discomfort and pain from the presence of calculi in the bladder, without very pronounced degeneration or disease of the vital organs, I should certainly have them removed either by lithotrity or lithotomy, and I know of no fairer test to apply in the recommendation of an operation of a serious nature than this—viz., "Would you have it performed upon yourself?"

CASE 3. *Calculus in the bladder of a man sixty years of age: lateral lithotomy: recovery.*—James W——, sixty, labourer, was admitted into the London Hospital on April 24th, 1878. Eight months previously he had passed two small pieces of stone about the size of a small pea and quite smooth. When he was at rest the urine remained quite clear, but it became thick after extra work, and he experienced great pain. He attended as out-patient and was sounded, but no calculus was found. On April 27th he was again sounded, and I obtained audible evidence of a calculus. On May 1st there was more pain, of a cramp-like character, accompanied by frequent micturition and sudden stoppages of the urine. For the last three days the urine was passed every twenty minutes or half an hour. At night he passed water every ten minutes. There was considerable pain during the act of micturition and there was blood in the urine. Washing out the bladder with warm water gave relief. On May 23rd I performed lateral lithotomy and removed a mulberry calculus the size of a small walnut. The oozing which occurred after the operation was arrested by subcutaneous injection of ergotine. The patient made an uninterrupted recovery and left the hospital at the end of three weeks.

Remarks.—The duration of the case was not longer than it would have been under the old system of performing lithotrity. As the patient was a healthy man, I believed that he would not run any greater risk from the cutting than the crushing operation; whilst he would be free from the pain which is often occasioned by small fragments of stone which have escaped the grasp of the lithotrite. As in the preceding case, the operation was a urethrotomy, accompanied by a very limited incision of the prostate.

CASE 4. *Calculus in the bladder of a man sixty-eight years of age: lateral lithotomy: recovery.*—James B——, sixty-eight years of age, labourer, was admitted into the London Hospital on Dec. 7th, 1880. He said that he felt quite well till four years ago, when he began to suffer severe pains in the hypogastric and perineal regions, which were of a cutting character and intermittent. Sometimes he did not feel them for several hours or days; they were always worst while he was moving about, obliging him to stop and sit down, when they would pass off. He had always lived in Norfolk (West Bilney, near Lynn) and been a very temperate man, drinking spring water which was clear and pure to the taste. In all respects, save as to the cause of his calculous complaint, he had been healthy. He had a fresh colour, and appeared to be free from organic disease. He had frequent desire to micturate, sometimes every quarter of an hour, attended with severe pain towards the end of micturition. He had not noticed the stream suddenly stop or found it easier to micturate in one position than another. He had never passed any pure blood, but after exertion the urine became very dark. As a rule the urine had been clear and never offensive. On admission it was loaded with mucus.

Immediately on the introduction of a sound into the bladder a calculus was struck lying close to the orifice, From the prolonged impression of contact with the calculus produced when the sound was passed over its surface, I judged that it was of considerable size. A lithotrite was introduced to determine the exact size of the calculus, but it was found to be difficult to seize it, and the further prosecution of the matter was deferred until the patient could be anæsthetised. The patient's consent having been obtained to the performance either of lithotomy or lithotrity, as might be considered best, he was placed under the influence of ether on the afternoon of the 13th, and an attempt was made to inject the bladder, but the water escaped by the side of the catheter and the bladder could not be induced to retain fluid however cautiously injected. The calculus was grasped by the lithotrite and found to exceed considerably an inch in one of its diameters, and from the ringing sound elicited on percussion it was evidently dense and hard. These circumstances, combined with the irritability of the bladder, made me decide upon the performance of lateral lithotomy. A rectangular staff was introduced, and, in the absence of any of my colleagues, was held by Mr. Makeham, one of my dressers. No difficulty was experienced in reaching the bladder; but the viscus being empty, there was no gush of water to carry the calculus within the grasp of the forceps. As soon as the calculus was seized, it was found impossible, without undue force, to extract it through the limited opening made in the prostate. I therefore introduced my left index-finger and cautiously enlarged the opening by incising the prostate on the same side for a quarter of an inch with a probe-pointed knife slid along the finger. The neck of the bladder apparently remained intact. The stone then came out without effort. It was solitary. The patient was the subject of piles, brought on no doubt by the constant straining and frequency of micturition. The parts generally were vascular; and there was some smart hæmorrhage from the superficial branches of the pudic, one of which required ligature. Some oozing from the prostate was soon stopped by the introduction of ice into the wound and into the rectum. The tube was not used; in fact, I now generally dispense with it both in children and adults. The stone was chiefly composed of lithic acid. It was ovoid and flattened, and measured 2⅛ in. in its longest diameter, and nearly 1 in. in thickness. It weighed 1¾ oz. Its surface was slightly nodular and without facets. A hypodermic injection of ergotine frequently used after operations to ensure contraction of small arteries was administered before the patient was sent to bed. *On Dec. 14th* he seemed very well; no hæmorrhage; had a good night, and took his breakfast heartily. Temperature 100·2°.—15th: Going on well; no pain; sleeps well; appetite good. Temperature 99·2°, gradually coming down to normal. Bowels well open, and passes a little urine by the natural passage.—22nd: Has progressed without a bad symptom. Temperature normal. Most of the urine passes through the wound. The patient made a rapid and excellent recovery in every respect, and was able to leave the hospital cured in a few weeks.

Remarks.—Prior to the introduction of "litholapaxy" the foregoing case would have illustrated very well the circumstances under which lithotomy should be preferred to lithotrity. The size of the stone and the extreme irritability of the bladder, which could not be induced to retain any water, would have been the determining points in the case. At the present time it is, perhaps, scarcely possible to fix a decided limit of size at which lithotrity should end and lithotomy begin, the practice of continuous crushing and removal of fragments at one sitting having abolished one of the main objections to the application of lithotrity to large calculi. It was not so much, therefore, the size and hardness of the calculus as the resentment of the bladder which decided a resort to lithotomy as the safer operation for the patient to undergo. The temperate habits of the patient and his healthy appearance led to the belief that his kidneys were free from organic disease and that he would bear the operation well, and the belief was justified by the result. The patient when last heard of (at the beginning of 1884) was in good health.

CASE 5. *Large vesical calculus in a female; vaginal lothotomy; cure.*—Elizabeth B——, aged seventeen, collar dresser, a stout pasty-looking girl, was admitted into the London Hospital on July 3rd, 1883, from the out-patient department. She stated that nine months previously she passed blood in her urine, which dribbled away from her. The dribbling lasted two months and then passed off. About a fortnight before admission she had to pass her urine twelve or fourteen times in the twenty-four hours, sometimes only a tablespoonful at a time. Lately she had not seen blood in her urine.

On admission she complained of frequency of micturition and of pain during the act. She had to strain to pass urine. On examination with the sound a stone of large size was at once detected. The urine was found to be remarkably pale and contained urates, but no phosphates, as a deposit.

On July 25th the patient was anæsthetised and a lithotrite introduced into the bladder, when the great size of the stone became apparent. As it was not easily grasped and as the urethra was not readily dilatable, I decided on removing the stone at once through the vagina. A duck-bill speculum was introduced into the vagina and a grooved staff into the bladder, and an incision was made through the anterior vaginal wall, the wound being enlarged with a blunt-pointed bistoury both upwards and downwards. The stone was then seized with the forceps and with some difficulty extracted, care being necessary to avoid bruising the edges of the wound. After extraction the bladder was washed out and the edges of the incision brought together with five or six silk stitches, some of the stitches being made to include the mucous membrane of the bladder. An S-shaped catheter was retained in the bladder for a few days.

The patient went on very well after the operation till July 28th, when she was found to wet her bed at night. The bladder and vagina were daily washed out, and no fistula was detected by the house surgeon; but on examination on August 11th urine was seen to pass into the vagina from the bladder, and I removed one or two stitches in the middle of the wound, which had become loosened. On the 14th I removed the remainder of the stitches, and perceived that the incision had healed save in the centre, where a small fistulous opening remained. This was cauterised with the nitrate of silver stick. On the 16th it was noted that the urine came through the urethra and there was no incontinence either by day or night. The urine was normal. The patient remained in till the early part of September, gaining in weight and free from discomfort. Before leaving she was examined with the speculum, and the wound was closed in its whole extent. The stone, which was of an oval shape, weighed nearly three ounces, and measured in the long circumference six inches and in the short five inches and a quarter. It was composed externally of a thick layer of phosphates. In the interior, situated excentrically, there are some rings of lithates, *alternating with phosphates, and in the centre* a nucleus, consisting apparently of lithic acid. A peculiarity in the patient's dietary, which might hold a causal relation to the calculus, is mentioned in the notes. She was very partial to pickles of all kinds, and had eaten them largely and almost daily for a long time.

Remarks.—Whilst lithotrity is applicable to the majority of cases of stone in the female there are some cases which, I think, are better treated either by extraction or lithotomy. For small calculi dilatation of the urethra with the finger and extraction with forceps can be carried out without inducing incontinence. Where lithotomy is selected I should certainly give the preference to the vaginal operation, avoiding the urethra altogether. If a clean incision is made and all bruising of the edges of the wound avoided, the wound can be immediately closed after extraction, and no fistula need remain. It is generally recommended that the mucous membrane of the bladder should not be included in passing the stitches. I departed from this recommendation in the present instance without disadvantage.

Finsbury-square, E.C.

SANITARY INSTITUTE OF GREAT BRITAIN. — The exhibition of sanitary apparatus and appliances and articles of domestic use and economy, to be held at Leicester from Sept. 22nd to Oct. 10th in connexion with the eighth autumn congress of the institute, is divided into five classes. The first relates to building materials, construction, and machinery; the second to water-supply and sewerage; the third to heating, lighting, and ventilation; the fourth to personal *hygiene, foods, and disinfectants*; and the fifth to articles of sanitary interest not included in the above classes, such as scientific instruments, books and periodicals, models and drawings, prevention of accidents, respirators and face-guards for unhealthy occupations, fire-preventing appliances, methods for the disposal of the dead, &c.

ON THE

ORIGIN AND FORMATION OF LACTIC ACID, CREATINE, AND UREA IN MUSCULAR TISSUE.[1]

BY P. W. LATHAM, M.A., M.D., F.R.C.P.,
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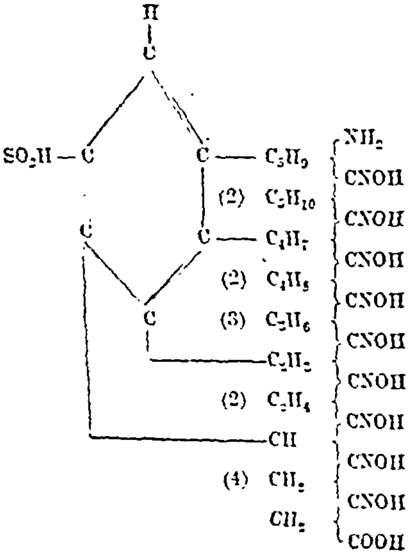
AFTER pointing out that sarco-lactic acid differed from fermentation lactic acid, and might be regarded as a mixture of ethidene and ethene lactic acids, these being obtained by converting ethylic and ethene alcohols into cyanhydrins, and then acting upon them with acids or alkalies, Dr. Latham suggested that the dehydration of the glycines or amido-acids, glycocine, leucine, &c., could give rise to these cyanhydrins—a molecular change taking place in the conversion of $CO.NH_2$ from the dead state to the living, into $CN.OH$—that by dehydration of the glycines generally the following change would take place:—

$$3C_nH_{2n}\left\{\begin{array}{l}NH_2\\COOH\end{array}\right. = \begin{array}{ll} & NH_2\\ C_nH_{2n} & \\ & CN.OH\\ C_nH_{2n} & \\ & CN.OH\\ C_nH_{2n} & \\ & COOH\end{array} +2H_2O$$

Then by dehydrating six molecules of glycocine and three of each of the other glycines in the series up to leucine, together with a sulphur compound and attaching them to a benzene nucleus (taking the formula for tyrosine as an example), we should have a compound represented by the following formula:—



the numbers in the brackets representing the number of times that cyanhydrin is repeated in that group, and the composition of the compound would be $C_{72}H_{112}N_{18}O_{22}S$; which is almost identical with the formula given by Lieberkühn viz., $C_{72}H_{112}N_{18}O_{22}S$.

By hydration of these cyanalcohols the corresponding acid would be formed and ammonia liberated, which, however, combining with the next molecule higher up in the chain, would form a cyanamide. In this way the molecules being detached from the benzene nucleus, we should get the following compound:—

$$\begin{array}{ll} & OH\\ C_2H_4 & \\ & CN.OH\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array}$$

Three different conditions now present themselves: (1) the molecule $CH_2\left\{\begin{array}{l}NH_2\\CN\end{array}\right.$ may become detached, or (2) the molecule $CN.NH_2$ or (3) the larger molecule $\begin{array}{ll} & OH\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array}$ may be separated from the chain. In Case 1 we should have by hydration

$$\begin{array}{ll} & OH\\ C_2H_4 & \\ & CN.OH\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array} + H_2O = \begin{array}{ll} & OH\\ C_2H_4 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array} + CH_2\left\{\begin{array}{l}NH_2\\COOH\end{array}\right.$$

and so on, the remaining two molecules by hydration being converted into $CH_2\left\{\begin{array}{l}NH_2\\COOH\end{array}\right.$ glycocine, $C_2H_4\left\{\begin{array}{l}NH_2\\COOH\end{array}\right.$ alanine, and NH_3, which last passes on to form another cyanamide in the chain.

If, on the other hand, the molecule $CN.NH_2$ is detached, we have

$$\begin{array}{ll} & OH\\ C_2H_4 & \\ & CN.OH\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array} = \begin{array}{ll} & OH\\ C_2H_4 & \\ & CN.OH\\ CH_2 & \\ & \\ CH_2 & \\ & CN\end{array} + CN.NH_2$$

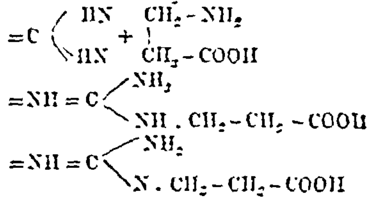
and there is formed the next cyanalcohol in the series $CH_2.CH_2\left\{\begin{array}{l}OH\\CN\end{array}\right.$ or $C_2H_4\left\{\begin{array}{l}OH\\CN\end{array}\right.$, and cyanamide; the latter with water forming urea:

$$CN.NH_2 + H_2O = \underset{\text{urea.}}{CO\left\{\begin{array}{l}NH_2\\NH_2\end{array}\right.}$$

In this way we pass from the lower cyanalcohols to the higher with the formation of urea, the two molecules of CH_2 combining to form C_2H_4. From this and from the other form of $C_2H_4\left\{\begin{array}{l}OH\\CN\end{array}\right.$ higher up in the chain, by hydration, lactic acid would be produced possessing the ordinary characters of sarco-lactic acid. In Case 3 by hydration we should have—

$$\begin{array}{ll} & OH\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & CN\end{array} + H_2O = \begin{array}{ll} & NH_2\\ CH_2 & \\ & CN.NH_2\\ CH_2 & \\ & COOH\end{array}$$

$$= CN.NH_2 + \begin{array}{l}CH_2-NH_2\\ |\\ CH_2-COOH\end{array}$$



the ordinary formula for creatine—and according to this we ought to obtain creatine artificially from ethene alanine. The fact that the cyanalcohols might be transformed into some acid and the different cyanamides, two and three molecules of the latter easily condensing with elimination of ammonia, was referred to as offering some clue to the phenomena of rigor mortis and the coagulation of the blood.

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[1] Abstract of a paper read before the Cambridge Philosophical Society, May 11th, 1885.

CITY ORTHOPÆDIC HOSPITAL.—The thirty-third anniversary festival in connexion with this institution was held on the 15th inst. The charity was founded in the year 1851, to give free advice and assistance to poor persons of every nation suffering from club-foot and curvature of the spine, and contractions and distortions of the limbs. During nearly thirty-five years of its existence it has relieved 45,548 cases of deformity. The number of patients admitted to treatment during the past year was [illegible].

CASES
ILLUSTRATIVE OF CEREBRAL SURGERY.

By WILLIAM MACEWEN, M.D.,
SURGEON TO THE ROYAL INFIRMARY, GLASGOW.

(*Concluded from p. 883.*)

CASE OF MONOPLEGIA OF LEFT ARM AND LEG DUE TO CORTICAL LESION.

Summary.—Left-sided motor monoplegia of arm and leg, preceded by muscular twitchings and tingling sensations, without loss of sensation, due to syphilitic lesion; cortical lesion in right motor area, superior half of ascending frontal and parietal convolutions, with probable involvement of paracentral lobule; trephining; internal table of osseous disc removed, showing osteophytic deposits; dura mater thickened; plastic membrane-like effusion over anterior and posterior ascending convolutions and bridging fissure of Rolando; resistant portion of brain towards paracentral lobule; incision into brain; escape of grumous fluid with pultaceous particles; marked absence of brain pulsations prior to removal of this matter; slight return after evacuation; exploration of interior of skull; discovery of osteophytic projections on occipital bone; second trephining to remove these; reimplantation of osseous fragments; complete recovery from operation, and power of left arm and leg restored so as to enable patient to walk about and to perform household work.

Case 2.—Mrs. McK——, aged twenty-five years, was admitted into Ward 22 of the Glasgow Royal Infirmary, suffering from left-sided hemiplegia. She had been previously under the care of two physicians, besides having been a patient in the Western and Royal Infirmaries. In the medical wards of the latter institution she had been under the care of Dr. Wood Smith, who had treated her for the hemiplegia by every medicinal means at his disposal without benefit, and who ultimately recommended her to be placed under my care, in the hope that something surgical might be done for her relief. She had a clear history of syphilis of more than four years' standing. The secondary symptoms had evidently been slight. Among other manifestations of the tertiary period was an ulcer situated over the upper part of the occipital bone, principally on the left side. There was a story of an injury over the same quarter, and the patient was inclined to attribute the ulcer to the blow rather than to the disease. For this tertiary affection she had been treated medicinally, with the result of the complete healing of the sores. Eight months after the ulcer on the head had healed, and while she felt herself otherwise in good health, she began to experience a tingling sensation in the muscles of the left arm, and subsequently in those of the left leg, which was occasionally accompanied by slight muscular twitches. These continued for about six weeks, the sensations gradually increasing until numbness supervened, spreading over the affected parts, and taking the place of the tingling sensations. Regarding the word "numbness," the patient used it, though she said that she could feel quite well in these parts, and that at no time had the sensation of touch been impaired. Towards the end of this period the left arm, which had been gradually becoming more feeble, had so far lost its power that she was unable to use it, and a "short time" afterwards she was obliged to go to bed, as she could not stand. Eight weeks from the commencement of these symptoms she had lost all power of the left arm and leg. Three months after the beginning of these symptoms she was admitted into my ward. On examination, the patient was found to have absolute motor paralysis of the arm and leg, accompanied by sufficient rigidity to indicate a slight degree of spastic condition of the muscles. The sensation over the affected limbs was unimpaired. She complained of languor and a general sense of oppression. Her intelligence was dull and her memory defective. Tapping the head gave rise to disagreeable feelings, but there was no specially localised sensations with the exception of a tenderness over the occipital region at the site of the scar left by the tertiary ulcer. It was apparent that there was a lesion or lesions in and confined to the cortical areas controlling the movements of the leg and arm. The absence of anæsthesia in the affected parts from the very beginning of the attack pointed to the lesion being cortical rather than central. According to Charcot and Pitres cortical cerebral monoplegias affecting the arm and leg coincide with lesions in the superior half of the ascending frontal and parietal convolutions. Viewing the pathological conditions which existed here and the clinical history, it was possible that two separate lesions were present acting coincidently, the one on the arm the other on the leg, a short interval of time existing between the initial manifestation of each. In that case, the lesion affecting the power of the arm would involve chiefly the middle of the ascending frontal and to a less extent the corresponding part of the ascending parietal; while the paracentral lobule would be looked to as the seat of the lesion affecting the lower limb. The history showed that the lesion at first induced cerebral irritation, though its true destructive nature was subsequently evinced, and descending degeneration of the motor tracts was imminent, if it had not already set in. The nature of the affection from a pathological standpoint was clearly syphilitic, probably in the form of a gumma.

As the treatment, especially that by counter-irritation, and the prolonged administration of anti-syphilitic remedies, had failed to effect the slightest improvement, it was deemed advisable to have recourse to operative measures. Before trephining was performed, three weeks were permitted to elapse, during which no anti-syphilitic medicines were given, partly with the view of ascertaining whether those formerly exhibited would produce any effect, and partly to avoid obscurity as to the result of the operation. By elevating a large disc of bone so as to expose the greater part of the upper portion of the ascending convolutions it was believed that the lesions affecting the arm and leg could be removed, and at the same time, if the paracentral lobule was involved, it could be reached by making a transverse incision into it through the brain tissue.

Operation, June, 1883.—The hair having been freshly shaven and the scalp thoroughly cleansed, first with soap and water, then with turpentine, and finally with an antiseptic solution, a disc of bone over an inch in diameter was elevated from the right side of the skull, its anterior border touching a point about half an inch behind the auriculo-bregmatic line, while its upper margin reached a point about an inch from the centre of the longitudinal sinus. The internal surface of this disc was rough from osteoplastic formation, some of these irregularities projecting nearly one-sixteenth of an inch beyond the level of the internal table. Round the circumference of this aperture the dura mater was normally adherent to the skull, except towards the posterior part, where it seemed slightly separated from the bone, and where the probe easily passed between the dura mater and the skull for fully two inches, at the extremity of which it met with a similar roughened portion of the internal table of the skull, at the posterior border of the parietal, near the lambdoidal suture. This corresponded internally to the right extremity of the scar left by the former ulcer of the scalp over the upper portion of the occipital region. The dura mater exposed by the elevation of the disc of bone was more opaque than usual, its external surface being somewhat roughened by numerous yellowish indentations, corresponding to the osteoplastic formations. A crucial incision was made into it, and the flaps so formed were gently retracted, when this membrane was seen to be thicker than usual. The appearance of the parts was such as to suggest the probability of the fusion of the arachnoid to the dura mater. A yellowish opaque effusion covered the surface of the brain, obscuring the outline of the convolutions and bridging the fissure of Rolando. On attempting to remove this it was found to be very friable, and it came away in minute portions, and was evidently composed of masses of leucocytes held together by fibrin. On the removal of this effusion it was seen to have covered the middle and upper portion of the ascending frontal, dipping slightly into and covering the fissure of Rolando, as well as the anterior border of the ascending parietal convolution. It was thickest over the upper portion of the ascending frontal and shaded off towards the lower end of the middle third, and while thick over the fissure of Rolando, it formed only a thin layer on the anterior border of the ascending parietal. The surface of the exposed brain was softer than normal, and there were as yet no discernible pulsations. Towards the upper third of the trephine opening a portion of the brain was felt to offer greater resistance to the finger on palpation than the surrounding parts. This sensation proceeded from the interior of the brain, in the direction of the paracentral lobule, a layer of brain tissue intervening between this more resistant structure and the finger. The boundaries of this denser portion could not be well defined, but it was at least the size of a large filbert. An incision was made through the upper portion of the ascending frontal at its posterior margin towards this firm structure, and after cutting into it a quantity (probably about two drachms, though this was not measured) of grumous fluid mingled with minute pultaceous particles quickly escaped; after which the former resistance of the part entirely disappeared, and in its stead the brain surface seemed slightly collapsed, and the cerebral tissue felt softer than usual. The cerebral pulsations, which hitherto had been unobserved, were now barely discernible; they were not so distinct as to be recognised by many of the surgeons round the table. The objects for which the operation was undertaken having been attained, the flaps of the dura mater were replaced, and an aseptic sponge was laid over the opening in the skull. It was, however, considered advisable to elevate a small disc of bone from the posterior portion of the parietal near its junction with the occipital, at the spot where the former exploration revealed the presence of osteophytic deposits, so as to prevent the possibility of future irritation. This was done. The osteophytic irregularities were found to project, for nearly an eighth of an inch, from the normal level of the surface of the internal table. The dura mater, with the exception of slight opacity and indentations corresponding to the osseous irregularities, looked healthy; and the cerebral pulsations were distinctly evident through it. The osteoplastic formations were cut off by the chisel, along with a portion of the internal table of the skull. The remainder of the disc was then divided by the chisel; the pieces of bone were reimplanted and the scalp stitched over them, a decalcified chicken-bone drainage-tube having been placed between the scalp and the skull. The large osseous disc first removed, which since its elevation had been kept in an aseptic sponge, was now divided into small portions, care being first taken to render the internal table of the skull smooth. These portions were reimplanted, space being left between the fragments for drainage. The scalp was then accurately brought together by a few chromic stitches, a small decalcified chicken-bone drainage-tube having been introduced at the lower angle of the wound. The scalp was then dried and powdered with iodoform, except at the parts where the drainage-tubes issued, and which were covered by a small piece of moistened gauze. A eucalyptus gauze dressing was applied over all, and secured by a portion of elastic webbing.

Forty-eight hours after the operation the patient stated that she felt much relieved. The numbness in her left leg had disappeared, though it still remained to a slight extent in her left arm. Four days afterwards the numbness in her left arm had disappeared, and she could move her toes. There was no power of movement in the muscles of the arm or hand. At the end of a week she moved her toes freely and her foot partially. She had also regained the power of moving her fingers to a limited extent, and there was likewise an ability to move the whole arm, principally from the shoulder. At the end of a fortnight she could raise her whole left lower limb from the bed, flex the knee to a slight extent, and move the toes and ankle freely. She flexed and extended the fingers, opened and shut her hand, though the power of grasp was feeble. Her arm she raised to very near the level of the shoulder, though the elbow could neither be flexed nor extended. Three weeks after the operation all these movements had improved, she had greater strength of grasp, and more control over the movements of the lower limb. Her temperature had never been above normal; and there was no stain through the dressings, which had not been touched since the operation. They were, however, removed at the end of this period, and the wounds appeared quite closed. There was only a little blood-stain on the dressing. The extremities of the decalcified drainage-tubes, which had projected slightly beyond the external level of the scalp, were found detached and lying in the dressing. As a precautionary measure, a fresh antiseptic dressing was applied. During the last week the patient had expressed herself as so well that she desired to rise from bed, to which she had hitherto been closely kept and carefully watched. She was, however, advised to remain in bed for two weeks longer. Her diet, which up to this time had been solely milk, was now slightly varied, small quantities of bread and beef-tea being permitted. Six weeks after the operation the dressings were removed from the head, the wounds being found quite firm. The reimplanted bones were firmly attached to the skull. She was permitted to rise from bed, and a more liberal diet was given. Two months after the operation she could walk about unaided, but with a hemiplegic gait, a certain amount of dragging of the left leg, flexion at the knee being still very slight. She could open and shut her hand; but while she could grasp very firmly with her left hand, once she closed the hand on any object it was difficult for her to open it again, unless her attention became diverted. She improved steadily in bodily health and strength until she was able to do ordinary house work, and to walk about easily, though still with a drag of her left lower limb, and to use her left arm when alone, or when not excited, with considerable advantage.

This patient has since reported herself on many occasions at the hospital. The last time she was seen in April, 1885, one year and ten months after the operation. Notwithstanding the fact that since she was dismissed from the hospital she had lived under the most adverse circumstances, her previously affected side was still performing its function as well as formerly. She had walked a mile that day to the hospital, and intended to walk the same distance to her home. She performed her household duties by herself, and stated that she was quite able for them.

There have been seventeen cases under my care in which operations have been performed upon the skull and its contents for the relief of cerebral pressure or other brain lesion. In fourteen trephining was performed and in three elevation of the bones. Out of these seventeen cases, there were three deaths occurring in patients whose prospect of recovery was placed at a bare possibility. In these three, the operation of trephining in no way hastened death: on the contrary, there was reason to believe that it had prolonged life. In eleven of these, the bones which had been elevated were divided and reimplanted. The reimplanted bones in all but two cases succeeded perfectly, and in these two the majority of the fragments lived. In the fourteen cases which recovered there were no untoward symptoms after the operation, the temperature remaining normal throughout, and in almost all the wounds healed without pus production. Hernia cerebri has not followed as a result of any of the operations. It was formed on one occasion at the moment of opening the skull from the acute inflammation which was present in the brain prior to the opening of the skull.

In 1876 I had diagnosed an abscess in Broca's lobe (posterior part of the base of the third left frontal convolution) from the symptoms which were exhibited, and had urged the opening of the abscess, which was, however, negatived by the parents until it was too late to do anything effectively for the relief of the patient. The operation was, however, performed on the dead body, the same steps having been taken as would have been had the operation been performed on the living. The abscess in the brain was opened by the bistoury inserted through the trephine opening, thus proving conclusively the accuracy of the diagnosis, and showing that the operation proposed was the correct surgery of the case. On many subsequent occasions localising symptoms, such as those arising from lesion in the motor area, have been made use of in aiding the diagnosis, and in a number of instances such symptoms have been the only guide to the cerebral lesion. Two of these cases are here given. For the guides which we have received for the localisation of function we are indebted to many observers—Broca, Charcot, Pitres, and Hughlings Jackson on the side of patient clinical research, and Hitzig, Ferrier, and others from the purely physiological side, aided by experiments on animals. Comparatively little advantage has hitherto been taken of these observations as a guide to surgical operations. I had therefore much pleasure in describing to Professor Ferrier, when he visited my wards in Glasgow in the spring of 1884, some cases of the same nature as those here presented, and I was glad that he so soon afterwards had the opportunity of advising and assisting Dr. Hughes Bennett and Mr. Godlee in the case in which the latter removed a tumour from the brain. Mr. Godlee's case unfortunately died from hernia cerebri, and Professor Ferrier asked me some questions on the frequency of hernia cerebri after the operations which I have had. I could have answered that in no case has hernia cerebri been a result of any operation performed by me. But in one instance false hernia cerebri did form at the moment of opening the dura mater. A large mass was extruded, consisting of red blood-corpuscles, leucocytes, and a few pus-corpuscles—a mass on the eve of abscess formation. It is of course clear that since this was protruded at the moment of opening the membranes, this material must have been in existence for some time prior to the operation, and was therefore not the result of the operation. I consider that such a case is of great importance, as showing how false hernia cerebri may form after operations on the brain. False hernia cerebri is supposed by most surgeons to form from a septic condition of the wound, and I quite agree that a septic condition is probably the most frequent cause of false hernia cerebri, but it must be recognised as only *one* of the causes of irritation which set up this condition. We have round most tumours and cerebral lesions a limited area of softening or encephalitis. If such an area exists, it requires to be considered as one of the elements likely to give rise to hernia cerebri, and therefore as one of the risks of the operation. If those observers who have done so much in the way of diagnosing cerebral affections could give precise indications which would enable us not only to say that a tumour or other lesion existed at a certain part of the brain, but also how much and to what degree the brain tissue in the vicinity of this lesion was affected by inflammation, it would enable us to prognosticate whether hernia cerebri would be likely to result from the operation, to anticipate its formation, and to prepare the way for its treatment. It is clear, then, that we have two points to consider: *not* only the lesion (tumour or syphilitic gumma, &c.), but also the amount of localised encephalitis existing at the time. It is further clear that we ought to try to allay this secondary irritation round the tumour or other lesions prior to performing the operation. It may, therefore, be summed up thus:—In certain cases of acute encephalitis involving the surface of the brain, where the inflammatory action is sufficiently far advanced, false hernia cerebri will form, provided an aperture be made through the skull and the membranes to permit of this extrusion. Unless the inflammatory action in the brain substance has taken place to a sufficient extent, false hernia cerebri will not form, even supposing opportunity for extrusion be afforded by an aperture in the external parts. Healthy brain tissue will not be extruded through an aperture in the skull except as the result of violence or pressure exercised from within. Operations on brain tissue, which is not in this state of acute and advanced inflammatory action with blood extravasation, will not produce hernia cerebri, provided that after the operation the brain tissue is not irritated to a sufficient extent to induce this amount of inflammatory action. The chief cause of false hernia cerebri, after intra-cranial operations, is decomposition; and this cause can be prevented by the use of antiseptics. If inflammation in the brain exists at the time of the operation, hernia cerebri may form, notwithstanding the use of antiseptics.

CASE OF FRACTURE OF LARYNX.

By JOHN B. BERRY, M.D., C.M. EDIN.

DURING the afternoon of February 6th I was called to see G. L——, aged twenty-one. He was reclining on a sofa, looking very pale. Extending from the tip of the chin to just above the hyoid bone was a superficial wound. The voice was like that of laryngitis. The prominence of the thyroid cartilage was gone. Placing my hand over the throat and requesting the patient to swallow, I detected unmistakable crepitus of the moving larynx. A more careful examination revealed what felt like a separation of the wings of the thyroid cartilage. The history of the accident was briefly this. About twenty minutes before I saw him he was working a circular saw, and was suddenly struck in the throat with great force by a large piece of wood coming from below upwards. For a few moments he had a hard struggle for breath, but managed to keep from falling by leaning against a bench. Water was brought to him, but he declined it as he feared it would choke him. With the help of two men he walked home, a distance of about 500 yards from his work. Having applied a warm-water dressing to the throat, the patient was put to bed, his head and shoulders being raised. An hour later I saw the patient again in conjunction with Mr. Chaffers, whose help I sought when I saw the case was of such gravity. My diagnosis was confirmed, and seeing the patient was free from urgent symptoms, the breathing being quiet and full and the condition of shock gradually passing off, we considered it best to continue the warm-water dressings and forbid anything being taken by the mouth except ice, leaving word that any change in the breathing should be immediately reported to us. About 1.30 next morning I was called up, as the patient was reported to be choking. After sleeping for about an hour and a half, during which time he breathed rather noisily, he woke up somewhat suddenly and at once began to struggle for breath. When I arrived he was *unconscious*, the eyes were open and fixed, the pupils dilated, the face pale, and the deep spasmodic efforts to breathe were failing. Having sent for Mr. Chaffers, I at once performed laryngotomy. Still no air seemed to enter, and no mucus escaped from the tube. Having satisfied myself the tube was clear and that no blood was obstructing the air-passages near the wound, I enlarged the opening and replaced the tube, with no better result, death taking place after a few more respiratory efforts had been made. Half an hour after death Mr. Chaffers and myself examined the larynx and trachea as well as we could through the operation wound. Besides the separation of the wings of the thyroid oblique lines of fracture were made out on each side, through the wings themselves. Within easy reach of the finger, hanging down the trachea by a mere shred of fibrous tissue was a part of the left wing of the thyroid cartilage itself, the size of a finger-nail, apparently the lower front angle; this was easily removed. I regret no post-mortem was allowed, as I am still in doubt whether to attribute the asphyxia entirely to the one piece of cartilage found, which was not wedged in the trachea, but simply lying flat against the anterior surface, but it may have acted like a valve during inspiratory efforts. During life, I may add, there was no spitting of blood, and after death perfectly white frothy mucus welled up from the throat.

Keighley.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

SARCOMA OF THE KIDNEY; NEPHRECTOMY; CURE.

(Under the care of Mr. CROFT.)

THIS case is a very interesting one, few cases for removal of the kidney for sarcoma being on record. In the Transactions of the Medical and Chirurgical Society, vols. 63 and 64, a list of cases in which the operation had been performed is given by Mr. Barker. Two of these were nearly the same age as the patient who was under the care of Mr. Croft, but in one the disease had existed for two years and a half, and in the other for one year. In each the operation was successful, but in the latter recurrence had taken place in the neighbouring glands eight months after the operation. The prognosis is more favourable in the following case, where the disease had produced symptoms for seventeen days only before operation.

For the following notes we are indebted to Mr. W. J. Staddon, dresser.

T. H——, a boy aged three, was admitted under the care of Mr. Croft on Feb. 3rd, and left cured on March 17th, 1885. The family history was good. The patient had always enjoyed good health, and was apparently quite well until he was noticed to have passed blood with his urine on Jan. 21st of this year. He passed blood again on the 27th and on the 29th. On the 31st the medical attendant noticed swelling in the abdomen.

On admission, the boy was looking very healthy and well nourished. Examination of the abdomen showed a distinct projection on the right side, which on palpation was found to be due to a hard, somewhat elastic, movable tumour, not moving with respiration, which extended into the right loin, the surface of which was marked by large irregular bosses. Above, the free edge of the liver could be felt overlapping it. Dulness extended from the liver to the crest of the ilium, backwards to the spine, and forwards to the middle line, excepting in the position of the ascending colon, where there was resonance. The remainder of the abdomen appeared healthy: there was nothing abnormal in the chest. Urine: sp. gr. 1022, clear, of a light-straw colour, acid, no albumen, no cells, no casts.

Feb. 5th.—The patient was placed under chloroform and examined by Mr. Croft. No stone was detected. There appeared to be a rounded body of small size to the inner side of the growth, possibly an enlarged gland. Urine: sp. gr. 1035; very acid; excess of urea; no sugar.

7th.—The patient having been placed under chloroform, Mr. Croft removed the right kidney. A slightly oblique incision was made between the crest of the ilium and the last rib, about four inches and a half in length, ending anteriorly in the linea semilunaris; this incision was carried down to the peritoneum, when all bleeding points were ligatured. This incision not being large enough to admit of the tumour being extracted, a vertical one was made along the linea semilunaris about four inches in length, opening the peritoneum to the extent of two inches and a half; the tumour was then brought out of the wound as far as the pedicle, which was rather short, would allow. The pedicle was then ligatured in two sections: the first ligature (of silk) included the vessels, and the second ligature (of catgut) was placed on the ureter. After removal of the tumour, the peritoneal cavity, so far as it had been exposed, was sponged out, and the edges of the peritoneum brought together with continuous catgut sutures, after which the skin flaps were brought together with silk, a drainage-tube being placed in the most dependent part. The wound was dressed with oiled-silk protective, iodoform, iodoform gauze, and salicylic wool, gauze bandages being used, and over all a flannel bandage. The carbolic spray was used from the time that the peritoneum was exposed. The patient was very sick towards the end of the operation. The parts removed formed a mass as large as an adult fist. Examination showed the greater part to have been replaced by a large sarcomatous growth, there being only normal renal structure on the circumference of the growth, above and below. The growth was soft, elastic, bulging on section, presenting in parts an almost gelatinous appearance; in others there were small hæmorrhages. The growth projected into the pelvis of the kidney to some extent at one or two points, and also into the renal vein. Later microscopical examination proved the growth of round-celled character.

9th.—Has been going on very well since the operation, having had neither pain nor sickness. Pulse 144; tongue rather dry, slightly furred. Taking milk, tea, and toast. Wound dressed yesterday and looking well.

10th.—Pulse 114; bowels acted after an enema. Wound dressed.

12th.—Pulse 116. He had retention of urine for several hours during the night, and this morning there is some epididymitis on the right side.

15th.—Wound redressed, two stitches removed and the drainage-tube shortened; very little discharge.

22nd.—Pulse 127. Fluctuation having been felt in the right side of the scrotum an incision was made, giving exit to a small quantity of laudable pus. The operation wound was dressed; the granulations were found to be on a level with the skin, excepting where the drainage-tube had been.

March 11th.—Nitrate of silver applied to granulations on the right side. Most of the wounds have healed, as also the wound in the scrotum.

14th.—Got up.

16th.—Wound in right side almost perfectly healed, there being only a few small granulations not quite skinned over; is dressed with zinc ointment. The patient left on the following day, being very lively and looking remarkably well.

The highest temperature after the operation was 102° at 3 A.M. of the morning after the operation. For eight days there was an evening rise, varying from 99·6° to 101·4°; after that it became lower, rising, however, on more than one occasion to over 100°; this was in all probability connected with the epididymitis. The average daily quantity of urine was about 17 oz. after the operation. The patient continues in good health.

Remarks by MR. CROFT.—The rapid recovery in this case was partly due to the fact that the operation was performed before the growth had infiltrated or attached itself to neighbouring structures. Its enucleation did not necessitate [illegible] or the use of any force. Authors on [illegible] have [illegible] laid down any rule for the closing of the peritoneum, [illegible] has been disturbed in the course of the operation. It is worthy of observation in this case that the peritoneal wound was sutured independently of the rest of the wound; thus the cavity was closed against any exudations from the section of the abdominal wall. It would have been impracticable to have treated this according to the rules laid down for closing wounds in the median line. The occurrence of epididymitis was not easy of explanation, as the structural connexion between the parts disturbed or ligatured in the loin is not direct or obvious. Retention of urine came on with the epididymitis, and had not existed before it. It would be interesting to know if other surgeons have met with this complication.

NEWCASTLE-ON-TYNE INFIRMARY.

PRIMARY SARCOMA OF THE RETRO-PERITONEAL GLANDS; DEATH; NECROPSY; REMARKS.

(Under the care of Dr. PHILIPSON.)

J. H——, aged fifty-six, an auctioneer's clerk, was admitted on Nov. 22nd, 1884, complaining of pain in the epigastric region of about six months' duration. His father and a brother died of consumption, and another brother of spinal disease. The patient has had to lift very heavy weights; he has had good food and lodging, and has been fairly temperate; has had three attacks of rheumatic fever. About six months ago he first experienced a dull uneasy sensation in his right side and passing across the lumbar portion of his back. Pain became more decided and was generally worse at night; it came on in paroxysms with intervals of several hours. Gradually the pain became worse and the intervals shorter, till now he has seldom ten minutes' freedom from it. He did his work up to the time of his admission.

When admitted the patient was found to be a man of 5 ft. 7 in. in height, and weighing 9 st. 2 lb. (he used to weigh 10 st. 7 lb.). He is slightly cachectic, and has the appearance of suffering acute pain. The tongue is foul, appetite good, but accompanied by great thirst; the pain rarely crosses the back now, but starts on the right side, crosses the abdomen at the level of the umbilicus, and ends in the left side. The pain is intensified by lying down, but is relieved by sitting up; the greatest relief, however, is got by kneeling before the fire with his elbows resting on a low chair; deep inspiration brings on or aggravates the pain. There is visible pulsation in the epigastric and upper part of the umbilical region; in the right hypochondrium and epigastrium a hard resistant body is felt, reaching in the middle line nearly to the umbilicus, and in the nipple-line about three fingers' breadth past the free edge of the ribs. This body moves with respiration. As far as can be made out, its surface is smooth and its edge regular, and it is not tender, though there is pain on deep pressure. There is no pulsation on the right side of the mass, but on the left the mass rises and falls with the aorta; there is no expansile pulsation. There is continuous dulness from the seventh rib downwards to the edge of the mass. At the apex of the left lung there are distinct signs of consolidation and softening.

December 5th.—Has lost 1 lb. since admission. The pain has become so bad as to necessitate injections of morphia. Temperature varies between 99° and 102° F.

31st.—Is still emaciating. Does not complain so much of pain, but shows decided dementia.

January 24th.—Death.

Post-mortem examination.—The liver extends downwards as felt during life. Its surface is smooth, except on the under side, where there are two nodules about the size of peas. The anterior margin is unusually thin and covers a tumour about the size of the fœtal head lying on the spine. This tumour is evidently glandular, and has the pancreas attached to its left side, in front of it the pylorus and four or five inches of the duodenum, and behind it the aorta. The outline of the tumour is fairly regular, but with globular projections at parts. On section it is pretty firm, but with soft portions here and there. On microscopic examination it proved to be a spindle-celled sarcoma. Lungs: The left apex contained some tubercular deposits and small cavities, while the right had a slight tubercular deposit. Heart: Mitral orifice narrowed and curtains thickened. Brain: Considerable amount of subarachnoid fluid. Kidneys: Normal. No other deposits besides the two on the under surface of the liver.

Remarks by DR. PHILIPSON.—The chief interest of this case was in the differential diagnosis of a tumour situated in front of the abdominal aorta, from aneurysm. The non-existence of aneurysm was inferred from the absence of bruit in the left vertebral groove, and its pulsation being non-expansile. The existence of cachexia was in favour of malignant disease; the age of the patient strengthened this supposition; the smoothness of the surface of the liver and its uniform edge indicated that the swelling was glandular, rather than associated with that organ. Another point of interest was the coexistence of malignant disease and tubercle, cancer and tubercle being regarded as antagonistic one to the other. The nodules on the under surface of the liver were regarded as secondary, or consequential on the glandular condition; primary cancer of the glands being rare, while secondary cancer is not uncommon.

Medical Societies.

OPHTHALMOLOGICAL SOCIETY.

Ciliary Nerves in Certain Diseases of the Eye.—Spontaneous Disappearance of Diabetic Cataract.—Nævus of Choroid.—Reflex Ophthalmitis.—Periodic Paralysis of Third Nerve.—Coloboma.—Rupture of Eyeball.

AN ordinary meeting of this Society was held on May 14th, Mr. Jonathan Hutchinson, F.R.S., President, in the chair.

The PRESIDENT intimated that the Local Government Board had consented to receive a deputation from the Ophthalmological Society on the subject of the prevention of blindness from ophthalmia neonatorum.

Dr. BRAILEY read a paper on the Condition of the Ciliary Nerves in Certain Diseases of the Eye. Examinations in ninety cases of the long ciliary nerves, usually of both the inner and outer sides, by sections taken at right angles to their course in the sclerotic, showed the following results. It must be remarked that, being cases of excision for disease, the morbid process had been in every case severe, and in most of considerable standing. In primary glaucoma (thirteen cases) the nerve might be perfectly normal, but in about 22 per cent. there were indications of neuritis, the changes being, however, usually so slight as not to be incontestable. In a larger proportion (50 per cent.) the nerves were swollen, their axis cylinders being large and indistinct, or not visible at all. It was observable also that the average size of these nerves in eyes with glaucoma, whether primary or secondary, was considerably (almost 50 per cent.) beyond that associated with normal tension. Probably this enlargement was due to swelling of the nerve fibrils, as it was found even where the microscopical structure appeared to be quite normal. It produced considerable absorption of the sclerotic through which the nerve passed, so that this condition was indicated, especially in the case of the nerve of the inner side, by a wide dark-bluish streak corresponding to the course of the nerve. In eyes exciting sympathetic disease the nerve itself was usually normal in structure, though it might show slight traces of neuritis. But inflammation round the artery and nerve, more marked round the former, was found in the majority of cases (85 per cent.). In the sympathetically affected eye it was also found, though not quite so commonly (66 per cent.). He had, however, but three cases of sympathetically produced inflammation to examine. In uveitis serosa—independent, however, of any relation to sympathetic disease—inflammation round the artery and nerve also occurred, spreading evidently from the former to the latter. In the five well-marked cases of suppurative panophthalmitis that had been examined, the condition was similar to that above remarked as found in eyes exciting sympathetic disease, except that the inflammation around the artery and nerve was well marked in every case. In other conditions, such as iritis and irido-choroiditis of various origin, the condition varied, inflammation in and around the artery and nerve being occasionally found, though far more often absent. Two cases may be particularised: one, a non-suppurative iritis occurring after an iridectomy preliminary to cataract extraction; the other, with changes like those of progressive myopia—viz., disseminated choroiditis at the posterior pole and posterior staphyloma after leucoma adhærens. In each of them there was round the artery much inflammation, which had extended into the corresponding half of the nerve. It was inferred from the above observations that inflammation of the ciliary nerves was not the means by which sympathetic disease was transmitted; also that inflammation round the nerves and their companion arteries was equally ineffective in this case, as it occurred at least as strikingly and as commonly in suppurating eyes. The corneal anæsthesia found in absolute glaucoma was explained by the degeneration of the elements of the nerve, which, together with the other changes noted in this disease, appeared to be secondary to the mechanical pressure upon them.—Mr. NETTLESHIP remarked that serous iritis was not recognised as due to sympathetic irritation. He asked what clinical evidence there was in Dr. Brailey's possession. Referring to cases of episcleritis about the front of the eye, he would like to know whether the inflammation extended along the outer surface of the sclerotic so as to involve the optic nerve and structures at the posterior part of the globe.

Mr. NETTLESHIP read a note on the Spontaneous Disappearance of Diabetic Cataract. So far as his literary researches went he had found that cases of the kind were very rare. Two cases were detailed in Dr. J. Seegen's work on Diabetes Mellitus. Seegen's first case was that of a man aged thirty-nine, who in July, 1863, about six months after the appearance of diabetes, noticed that his sight began to fail; the lenses were cataractous and hazy. Under treatment at Carlsbad the lenses cleared; the quantity of urine was reduced to one-half, but the percentage of sugar remained the same. In the spring of 1865 the lens again became opaque. The second case was that of a woman aged fifty-five, who was first seen in the autumn of 1867, soon after which the sight began to fail and became misty; she was treated for diabetes in February, 1868, and whilst under treatment the lenses became clear again. Dr. Tannahill's case was that of a coal-miner, who was seen when in prison. He had suffered from diabetes for eleventh months; both lenses were opaque throughout, the left more than the right. He was put on the ordinary diabetic diet, and had two grains of opium daily. Whilst under treatment his sight began to improve, the opaque lenses gradually cleared, and on inspection when he was discharged from prison no trace of cataract remained. No satisfactory explanation had yet been offered as the cause of diabetic cataract. The view that the lens contained sugar was a possible explanation, but the idea of a permanent degeneration was not borne out by the facts just narrated; moreover, there was a reappearance of the cataract in one case. The abstraction of water from the lens owing to an increased density of the blood or fluids surrounding the lens was a likely explanation.—Mr. HUTCHINSON said that congenital cataracts in young rabbits sometimes cleared up.

Mr. J. B. LAWFORD read notes of a case of Nævus of the Choroid. The patient was a girl aged eight, who was brought to the hospital on account of pain in the left eye following a blow. The mother did not know how long the eye had been blind. There was a capillary nævus of the left side of the face from the forehead to the chin. There were no nævi elsewhere. The left eyelids were involved, and presented a slightly puffy appearance. The right eye was normal. The conjunctiva of the left eye was normal. The lens was opaque and yellow. There was no perception of light. The tension was + 2. The left eye was excised. On examination, the choroid surrounding the optic disc, and for a distance of 5 mm. to 7 mm. from its margin, was thickened (·5 mm. to 1 mm.), and spongy in appearance. Under the microscope this area was seen to be channelled throughout with vascular spaces of varying size, whose walls were formed only by the choroidal tissue. A few dilated capillaries were also visible. Beyond the limits of the nævus the choroid was normal. There was an infundibular detachment of the retina. The lens was shrunken and its fibres much disorganised. The iris was atrophied and adherent to the cornea at the periphery.

Mr. SIMEON SNELL read the notes of a case of a Recurrent Paralysis of the Third Nerve associated with attacks of Migraine. The patient, a little girl aged eight, first came under observation in Nov. 1883. A note made then states: "There is complete ptosis on the left side, with divergence of the eye and general paralysis of the third nerve; fundus oculi normal; refraction hypermetropic, about 1·5 D." It was ascertained that she had had a failing of the left eye since cutting her "eye teeth," at eighteen months of age; since this time she has suffered from attacks of pain in the head and sickness, and at these periods the eye has closed, and after the subsidence of head symptoms, it commenced to open, but only very gradually became widely so again. These attacks have recurred about every six months. The severe part of one of these illnesses had just passed when she was first seen. Another attack came on in July, 1884, and the affection of the eye gradually passed away, as it had done before, and the condition was just as that described below. On Jan. 20th, 1885, she appeared at the infirmary with commencing drooping of eyelid; it began the day before. Next day the condition was characteristic of migrane, pain confined chiefly to the left side and over the left eyebrow. Ptosis was complete, and palsy of the other muscles supplied by the third nerve; the pupil was a little dilated, and did not act to light or accommodation. Recovery gradually took place in the ocular symptoms. On April 30th the eye was fairly wide open, but not quite so widely as on the sound side; there was divergence, but on effort a good deal of power of convergence; and movements upwards and downwards were extremely slight. The pupil was about the same size as the right, and acted very slightly to light or accommodation. V. (corrected) $=\frac{16}{200}$, and J. 16. There is a distinct neurotic history on both parents' side.—Mr. ERNEST CLARK had seen a somewhat similar case in a girl aged twelve. The attacks were preceded by vomiting and constipation, and attended with pain over the left eyebrow. The sight of the eye was dim. The pupil was slightly dilated; there was external strabismus and slight ptosis, which lasted a few days; the dilatation of the pupil lasted longer. The attack came on every six weeks. The teeth were very bad.—Dr. ORMEROD had also seen a case of recurrent paralysis in an elderly woman; the left eye squinted outwards. Some pain was experienced along the course of the supra-orbital nerve. There was nothing to suggest megrim. These attacks were not so transitory, and lasted two or three months. The first attack was apparently caused by shock on hearing of the death of a sister, and the second by fright at seeing a boy with facial palsy. The Argyll Robertson phenomenon was present, but there was no loss of knee-jerk. He said that Thomsen of Berlin had put on record a case which followed some shock to the nervous system in an epileptic patient; the field of vision was contracted, and this was said to be proportional to the degree of paralysis of the third nerve.—Dr. BEEVOR had seen a similar instance in which exposure to cold winds were assigned as the cause.

Mr. W. H. JESSOP showed a child, aged eight, who had suffered a blow on the eyeball from a fall on a bed post, which was followed by Compound Rupture of the Eyeball in February, 1884. The chief interest of the case was the rapid and complete recovery with useful vision. The rupture in the sclerotic was three or four lines in length, but that in the conjunctiva was large and needed three sutures.

Mr. W. H. JESSOP also showed a case of Posterior Coloboma of the Choroid in both Eyes on the temporal side of the disc. The lens on both sides contained striæ.

Mr. M. MCHARDY showed a woman aged fifty-four who presented a small, globular, dark, red Tumour in the Ciliary Region in the outer segment; a larger and similar growth had been removed in July, 1884. Also a girl, aged sixteen, in whom there was a great Development of Fat in the Upper Eyelids causing much deformity. He had excised an elliptical piece of the upper lid and a large mass of adipose tissue, this afforded some relief.—The PRESIDENT asked whether the first case was regarded as one of melanosis.—Mr. NETTLESHIP inquired how deep the incision went in the removal of the portion of skin; was the layer of muscular fibres cut away? He suggested that the fat might have been of orbital origin. He had seen cases in young women and one in a boy; in one case he had removed a fold of skin twice, but no fat escaped.—Mr. MCHARDY replied that he took care in removing the skin not to cut deeply; he used a pair of "sickle" scissors and removed the skin much in the same way as would be done in the operation of removal of skin for transplantation.

Mr. JONATHAN HUTCHINSON read a paper on the Pathology of Reflex Ophthalmitis. Seven years ago, in some lectures delivered at the Royal College of Surgeons, he treated of the influence of the nervous system in the production of disease. In these lectures he maintained the view that the nerves did not initiate disease by any exercise of their functional power. He maintained that the inflammation actually spread along the nerve filaments. This notion got rid of any suggestion of trophic power in nerves. He now argued that reflex ophthalmitis had nothing to do with the nervous system, for he suspected the circulatory fluids rather than the nerves were the means by which the secondary lesions were originated. The mode of spread or the multiplication of inflammations, malignant diseases, and the like, he explained on the theory of the absorption into the circulation of certain elements derived from the original seat of disease. These elements only produced lesions in those tissues which were practically similar to the tissues in which the original lesion existed. It was another case of selective affinity. So that inflammation was set up in certain parts to the possible exclusion of other parts. In multiple periostitis, for example, the primary lesion was followed by other lesions exactly similar. The lesions never began simultaneously; there was no structural continuity between one periostitis and another, neither by the lymphatics or the nerves. He believed that certain elements were shed into the blood-current, and induced similar inflammations in similar tissues; if a long bone were first affected it was a long bone that suffered secondarily. He would apply similar reasoning to the case of the eye. The elements were first given off from the ocular inflammation and circulated in the blood, and then picked out precisely similar tissues in the other eye as the seat of their selective inflammatory action. It was an example of emigration in which the emigrant, cast off from home, settled down and colonised in parts where the conditions were similar to those which he had left. He considered that such a theory would explain the very exact symmetry of reflex ophthalmitis and other related conditions. The theory held good, not only for traumatic diseases, but for other forms of acute inflammation, such as pneumonia and the like. A view closely analogous, though not actually identical, with this had been propounded by R. Berlin in Volkmann's *Archiv.* for 1880, though Mr. Hutchinson became acquainted with Berlin's views after his own theory had been formed, and as the result of Mr. Nettleship's literary researches specially made with a view to find out whether such a view as Mr. Hutchinson's had been previously formulated. Berlin regarded the infecting elements as parasitic, but Mr. Hutchinson asserted nothing as to the nature of the infecting element. Berlin thought that the smallness of the capillaries in the eye and the influence of light were some of the similar conditions which led to the development of the secondary ophthalmitis in a given case, but Mr. Hutchinson thought that the similarity of the tissues should be regarded as the reason why the secondary inflammation should develop in the opposite eye. Dr. Fitzgerald occupied the chair during the reading of this paper, the discussion of which was adjourned to the next meeting.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on Wednesday, May 6th, Dr. J. B. Potter, President, in the chair.

The following specimens were shown:—(1) Fœtus, showing numerous Deformities of the Limbs; (2) Living child, showing Absence of Lower Two-thirds of Left Forearm and Hand; (3) Two cases of Imperforate Rectum in New-born Children (Dr. Horrocks); (4) Double Pyosalpinx from a woman who died from perforation of the stomach by an ulcer—the pyosalpinx had caused no special symptoms (Mr. Malins).

Dr. MATTHEWS DUNCAN read a paper on the Ulceration of Lupus of the Female Generative Organs, including Perforations, Pits, and Excavations. Ulceration is not an essential part of lupus. Some ulcerations are to be regarded rather as excoriations than as lupus ulcers; generally ulceration is accompanied by hypertrophy. The hypertrophied parts are not specially liable to ulceration. The ulceration may affect the hip or thigh, or any part of the genital organs, external or internal, also the bladder and rectum. The ulceration is generally not sensitive. There may be one or many ulcers. Lupus minimus is characterised by small ulcerations. The skin, mucous membranes, and subcutaneous cellular tissue are the parts chiefly affected; but any structure (except bone) may be destroyed. Sometimes the skin is chiefly affected; sometimes the subcutaneous cellular tissue. The ulceration sometimes produces pit-like cavities; sometimes producing great excavations; sometimes perforating, producing fenestræ or fistulæ; the peritoneum may be perforated. The ulceration is not accompanied by sloughing. The ulcers may heal in whole or in part. Ulcers, the result of wounds of the hypertrophied parts, heal favourably. A specimen from the London Hospital (lent by Dr. Herman) was shown of Dilated Uterine Cavity with Perforating Ulceration.—Dr. HORROCKS mentioned a case under his care in Guy's Hospital, which he had observed for nearly two years. The patient was a single woman, never pregnant. Her complaint was pain in the pudendum and scalding on micturition. Small ulcers occupied the base of the hymen and fossa navicularis. There was no enlargement of the glands, and no history of sore-throat, but, on the suspicion of syphilis, mercury was given internally, and lotio nigra applied externally. No improvement resulting, caustics of various kinds were used, but pain persisted and no improvement followed. The hymen was apparently entirely eaten away, and along the line of its attachment were small red nodules, with a few tiny ulcers. The nodules were very different from carunculæ myrtiformes; there were no lineæ gravidarum, and the cervix was nulliparous. The tubercles were then removed by scraping with a sharp curette and by cutting away with the scissors. The bleeding was so free that one or two vessels had to be tied. Dr. Horrocks asked Dr. Duncan what was his experience of scraping, and what was the best mode of treatment.—Dr. GANDY asked whether there was any fetid odour or other characteristic discharge; whether he could explain the profuse hæmorrhage with so little physical evidence of disease. He related a case in a patient aged thirty-five, in fairly good health, who was suddenly seized with very profuse bleeding which was arrested by subcutaneous ligature. No cause for the bleeding could be discovered, and it now occurred to him that the case might be one of lupus. There was always pain on coitus, but there had not, so far as he knew, been any return of the bleeding.—Dr. CHAMPNEYS asked Dr. Duncan (1) on what grounds these very different affections were included under the same name; (2) why they were called lupus when the microscopists pronounced the appearances to be unlike those of lupus; (3) what these diseases were called before they received the name of lupus.—Dr. MATTHEWS DUNCAN replied that he used the term lupus because others did so. West in his "Diseases of Women" (one of the earliest English notices) used this term. Esthiomene was an awkward word. Lupus expressed the great eroding character of the disease; it included ulcerations, inflammations, hypertrophies, variously combined, and which were not cancerous, not epitheliomatous, not syphilitic. It might turn out that several diseases were included in this comprehensive term. At present they were combined for description on account of their apparent similarity. They were far from being as uncommon as was supposed.

Mr. WILLIAM DAY (Norwich) read a case of Uterine Fibroid complicating Labour and treated by Enucleation. The tumour itself presented, and above the tumour a breech. The size of the tumour and its immobility precluded the possibility of delivery while it was *in situ*. After separating its connexions to a great extent, and thereby attaining greater mobility of the tumour, delivery was effected by the feet, the remaining attachments were severed and the tumour removed. It weighed three pounds and a quarter, was a soft fibroid, and would nearly have filled an ordinary tall hat. A successful case of enucleation of a large fibroid immediately after parturition induced Mr. Day to adopt this treatment. The patient lived for twenty-eight hours after delivery. The child still survives.—Dr. BRAXTON HICKS reminded the Society of a case which he had read before it some years ago, in which he divided the capsule by a bistoury vertically, and enucleated the tumour from its capsule with complete ease and success. This he thought best in the case of sessile or embedded fibroids. He called attention to the work of Dr. Chalibazian on the fibrous tumours of the neck of the womb in pregnancy and labour, to a paper by Dr. Mundé of New York, and to a case of Dr. Fry, in THE LANCET for 1884. He thought that, where delivery was urgent, the general opinion was in favour of enucleating the sessile forms from their capsule, which, in all the cases reported, was not a difficult operation.

BRITISH MEDICAL TEMPERANCE ASSOCIATION.—The annual meeting of the Irish Branch of this Association will be held in the Royal College of Surgeons, Dublin, on Tuesday, June 2nd. The chair will be taken at noon by the President, Deputy Surgeon-General F. L. G. Gunn. The meeting will be open to all members of the medical profession.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

THURSDAY, MAY 14TH.

SIR H. ACLAND, PRESIDENT, IN THE CHAIR.

THE adjourned debate on Dr. Humphry's motion was resumed.

Dr. HUMPHRY asked permission to substitute for his motion the following: "That the examinations in general education conducted by universities be accepted as heretofore, but that if in any of these examinations the subject of elementary mechanics is not included, a knowledge of that subject should be required at a separate preliminary examination."

Dr. STRUTHERS said if the motion were so altered, he should be willing, if permitted, to withdraw his amendment.

The permission of the Council for the proposed substitution and withdrawal having been given,

Mr. MACNAMARA said he regretted that the Council had laid down such minute regulations in regard to general education, and had endeavoured to press them upon the universities. Dr. Haughton and the provost of Trinity College, Dublin, knew more on the subject of elementary mechanics and the best mode of teaching it than all the Council put together; and it was absurd to endeavour to impose upon the University another method of instruction or examination. They would, if the Council persisted, pursue the even tenour of their way, and the Council could not refuse to register the qualification obtained. He hoped the Council would not put itself in antagonism with the great universities. It was absurd to try to teach Oxford the best mode of teaching and examining in English. All details of the kind should be left to the great teaching bodies themselves.

Dr. PETTIGREW supported the motion.

Mr. MARSHALL said he retained his opinion as to the importance of English as a subject of education; but if the universities thought that they could secure a proper examination in the subject in a collateral way he would not recommend the Council to interfere with them. They had, he thought, complete liberty to examine in English as they liked. He did not approve of the method adopted by the University of Oxford, but he would not interfere with their freedom of action. He suggested that the first part of the motion be omitted—viz., "That the examinations in general education conducted by universities be accepted as heretofore," believing that it was quite unnecessary.

Dr. STORRAR said that the universities had a right to adopt their own methods of teaching and examining in general education; and that the Council ought not to endeavour to draw the bow too tightly, or seek to use a mandatory power, but rather be content with exercising moral suasion. As to the teaching of English, it was difficult to get the older universities to take up English as a separate study; but at the University of London the examination in English was regarded as one of the most difficult of any, and the subject was one of the best as an instrument of education.

After some remarks from Dr. PETTIGREW, Dr. STRUTHERS, and Dr. BANKS,

Dr. HAUGHTON said he objected to Dr. Humphry's motion. The existing state of things brought about by the action of the Council last year had left the Universities of Oxford, Cambridge, and Dublin frying in their own juice: Dr. Humphry's motion, however, took Oxford and Cambridge out of the frying-pan, and left Dublin in it; he therefore strongly opposed it.

Dr. HUMPHRY having replied,

Dr. HAUGHTON moved as an amendment that the word "preliminary" be omitted from the resolution.

Dr. BANKS seconded the amendment.

Mr. SIMON contended that if the word "preliminary" were omitted the motion would be mere waste paper. If there were anything special in the case of the examination at Trinity College it might be met by a proviso.

Dr. HAUGHTON said if "elementary mechanics" was not to be regarded as including statistics, dynamics, and hydrostatics, he would undertake that there should be an elemen-

-tary examination of students before registration at the Dublin University; but he could not undertake that the examination should cover the whole ground of fluids and solids. If his offer were accepted, he could vote for the motion, not otherwise.

Mr. SIMON said that the regulations of the Council would not permit of a definition of elementary mechanics which did not include fluids as well as solids.

Dr. HAUGHTON's amendment was then put and negatived, and the original motion was carried by fourteen votes against four.

Dr. HUMPHRY said he had received a reply from the Cambridge University stating that Ebenezer Bryceson (as to whom he had been requested to inquire whether he had taken the degree of M.B.) had only taken the degrees of B.A. and M.A.

Dr. QUAIN moved the reception of the following report of the Pharmacopœia Committee:—

"The Pharmacopœia Committee have to report to the Council that the duty assigned to them has been so far completed as to enable them to lay on the table a revised copy of the New Pharmacopœia. The Committee recommend that, with a view to the publication of the work now completed, the course adopted by the Council, when the Pharmacopœia of 1867 was published, be now followed. On this subject the Council passed the following resolution on May 26th, 1866: 'That as soon as the proof of the new edition of the Pharmacopœia is ready a copy of it be sent to each member of the Council, with instructions that he will, within one month, return it to the secretary of the Pharmacopœia Committee, with such observations as he shall see fit to make thereon, to be submitted to the Pharmacopœia Committee; and that the Pharmacopœia Committee shall, after due consideration of such observations, hand over the proof, when finally approved, to the Executive Committee for publication.' Should the Council approve of the recommendation of the Committee, they suggest that the Council now adopt the resolution passed on May 26th, 1866, substituting the word 'chairman' in line 4 for 'secretary,' and adding 'sub' before 'committee' in line 6 of the above-quoted resolution. A copy of the completed work will be forwarded within a very few days to the members of the Council for their approval. The Committee cannot conclude their report on the completion of the Pharmacopœia without offering their testimony to the great care, the scientific skill, and the assiduity with which the editors of the work—Professors Redwood, Bentley, and Attfield, and others—have performed their duties."

Dr. QUAIN said that a copy of the Pharmacopœia would be sent to each member of the Council for suggestions before the work was finally issued. It would be a little larger than the previous edition, and would contain about a hundred more pages, but he hoped that the price would not be increased, as no charge would be made beyond the mere expense of production. No effort had been spared to make the work as perfect as possible. Its issue to the public might, he thought, be left with the Executive and the Pharmacopœia Committees, but if any grave question should arise steps could be taken if necessary to consult the Council.

Dr. STORRAR seconded the motion.

Mr. MACNAMARA said he had devoted a great deal of time to materia medica, and could appreciate the labours of the Pharmacopœia Committee. He was well aware of the great zeal and ability, and the great amount of time, that Dr. Quain had brought to bear in supervising the Pharmacopœia, and he begged to move: "That the warm thanks of the President and members of the Medical Council are eminently due, and are hereby tendered to Dr. Quain, chairman of the Pharmacopœia Committee, for his invaluable services in supervising the forthcoming edition of the British Pharmacopœia."

Dr. BANKS seconded the motion, which was carried by acclamation.

Dr. QUAIN said he was completely taken by surprise at the compliment paid him by the Council. Such a recognition was an abundant reward for any labours that he had [illegible] with the Pharmacopœia. He had only [illegible] his duty, and [illegible] was only too [illegible] of the work [illegible] credit of the Council and the [illegible]

The O[illegible] Committee [illegible] a report in reference to [illegible] hall of meeting [illegible] Dr. L[illegible] [illegible]

Embankment. The first is that which immediately adjoins the Temple Gardens, and lies between them and Sion College. The cost is four shillings per foot square. The second site is on the Savoy Estate of the Duchy of Lancaster; and any portion of this site suitable for the purposes of the Council could be had at about two shillings per foot square rent per annum. It was assumed that a space of ground seventy-five feet by fifty feet would give ample accommodation in a well-planned two-storey building for a dignified and suitable council-chamber and the necessary offices. The letting of the present premises would in all probability balance the new rent of £675 incurred for the site. The Committee had considered Dr. Lyons' report, and were of opinion that one of the sites on the Savoy Estate of the Duchy of Lancaster would alone be adapted to the purpose, provided the Council were satisfied as to the necessity of removal and the convenience of the proposed site, and were prepared to incur the increased expenditure involved in the change.

Dr. LYONS, in moving the reception of the report, said that in the opinion of an architect whom he had consulted for his own guidance, the difficulties in the way of properly adapting the present building to the purposes of the Council were almost insuperable. After a careful inquiry over an extensive area in London, the only available sites appeared to be the two mentioned in the report.

Dr. QUAIN (a member of the committee) urged that the proposed site in the Savoy was objectionable on the grounds of inconvenience and expense. The rent of the present premises was £300 a year, but they were worth £600; while that of the premises in the Savoy would be £700 or £800. He thought that the existing premises could easily be so modified as to suit the purposes of the Council.

Dr. STORRAR (also a member of the committee) expressed his concurrence in the views of Dr. Quain, and objected to the large expenditure that would be required to erect a new building on the proposed site.

Dr. A. SMITH said the first question to be decided was whether the Council was willing to invest its large capital in a new and costly building.

Mr. SIMON thought that the Council should resign itself for the present to existing circumstances, and not go into the indefinite experiment of either largely altering the present premises or going to another site.

Mr. TEALE also recommended the Council to remain in its present premises. He thought that another room less objectionable than the present could be erected in another part of the building.

Dr. WATSON moved as an amendment: "That the report of the Offices Committee be referred to the Executive Committee with instructions that they continue the inquiry in the direction of improving the present premises, with powers to take professional advice, and to report to the next meeting of the Council."

Mr. TEALE seconded the amendment, which was agreed to. On its being proposed as a substantive motion,

Dr. STORRAR moved as an amendment: "That the report of the committee be referred to the Executive Committee with power to take such steps, under professional advice, as they may judge desirable to further improve the ventilation of the hall in which the Council meets, or, if necessary, to report on the improvement of the building at the next meeting."

Dr. QUAIN seconded the amendment, which was agreed to; and it was also passed as a substantive motion.

Sir H. PITMAN proposed: "That a committee be appointed to consider and report in what way, if any, the accumulated funds of the General Medical Council can be applied in promoting scientific research for the public good." The first consideration, he said, was whether the Council had power to appropriate any of its funds to scientific research. He thought it would be found that the Council had such power. Certainly it had funds at its disposal. From the account published last year it would be seen that during the last three years the average surplus income over expenditure had been £2[illegible] a year, and during the last seven years the average had been £19[illegible]. The Council had now standing to its credit the sum of £[illegible]. That included sums in the hands of the Branch Councils; but, of course, the whole of these funds were under the direction of the General Council. The Branch Councils had no special interest apart from the General Council. They were permitted to have the control of a certain portion of the registration fees, but they were [illegible] to the General Council [illegible] entire supervision of the funds, as would be seen by a reference to the Medical Act. The Act declared that "all moneys received by any treasurers arising from fees to be paid on registration, from the sale of Registers, from penalties or otherwise, shall be applied for the expenses of registration, and of the execution of this Act." The only question was whether his proposal would come strictly within the meaning of the words, "the execution of this Act." That it was so, he thought, would be clear from Clause 54:—"The General Council shall cause to be published under their direction a book containing a list of medicines and compounds, and the manner of preparing them, together with the true weights and measures by which they are to be prepared and mixed, and containing such other matter and things relating thereto as the General Council shall think fit, to be called the British Pharmacopœia; and the General Council shall cause to be altered, amended, and republished such Pharmacopœia as often as they shall deem necessary." His contention was that some portion of the Council's funds might be applied under that clause to investigations in relation to the British Pharmacopœia. To show the intention of the Legislature in such matters, he might refer to the Dentists Act, Clause 32, which said that all moneys received should be applied in accordance with such regulations as might be made by the Council in defraying the expenses of registration and other expenses of the execution of the Act, "and, subject thereto, towards the support of museums, libraries, or lectureships, or for public purposes connected with the profession of dentistry and dental surgery, or towards the promotion of learning and education in connexion with dentistry. In recent Medical Bills introduced into Parliament there had been a provision that any surplus funds might be applied to the promotion of such purposes as were contemplated for the profession of dentistry. Science had of late years made great advances, especially in connexion with sanitary questions, and the health of the public had greatly benefited by the improvements that had been carried out. He was anxious that some of the accumulated money of the Council should be expended in what, perhaps, might be called the physiology of therapeutics, with a view to making improvement in that direction, and keeping pace as far as possible with the progress of science in other directions connected with the profession. Why should the Council go on accumulating thousands of pounds every year? Notwithstanding the large expenditure on visitations, the Council had at least enough money at its disposal to justify it in applying some portion of its funds in the promotion of scientific research for the public good. The committee should, he thought, be a large one, so as to comprise every section of the profession.

Dr. Duncan, in seconding the motion, said it would be for the committee to inquire, amongst other things, whether the proposed expenditure was justified. For his own part, he thought it a very great grievance that the Council should possess such a large sum of money. If it could not get rid of it in the way proposed, it should do so in some other way. The responsibility of having so large an accumulated fund, making no use of it, and having no prospect of making use of it, was an unmixed evil.

On the motion of Mr. Simon, the debate was adjourned at the rising of the Council.

Friday, May 15th.

Sir H. Acland, President, in the Chair.

The debate on Sir H. Pitman's motion for a committee on scientific research was resumed.

Mr. Simon regarded it as absolutely unquestionable that the Council had nothing to do with the object named by Sir H. Pitman, and that any expenditure in the direction he had proposed would be a breach of trust. The Council was authorised to publish a Pharmacopœia; but that could not include the power to publish accounts of scientific researches such as those named by Sir H. Pitman. If the Council was receiving more money than it wanted, it could reduce the registration fee from five guineas to three, which would be quite within its power to do. He had had a good deal to do with grants for scientific research, and could assure the Council that the difficulties connected with the subject were very great.

Mr. Marshall said if it could be shown that all the expenses of the Council could be met by a registration fee of three guineas, the fee should be reduced to that sum. At present that could not be done, but in a few years he thought it could be easily carried out.

Dr. Struthers thought that the powers of the Council were very limited, and did not extend to expenditure for scientific research. The funds, however, could legally and usefully be applied to an extended system of visitation of examinations.

Dr. Watson hoped that the discussion would set at rest for ever the question of applying the funds of the Council to scientific research.

Dr. Humphry hoped that in future the visitation of examinations would be carried out more energetically than it had been. That was certainly an object to which the funds of the Council could be properly applied.

Dr. Lyons reminded the Council that it might have duties to perform which would require a considerable expenditure. He referred especially to the visitation of examinations, which ought to be widely extended and embrace every branch of education. It would be a great misfortune if such a work were hampered by pecuniary considerations. There ought to be a thorough annual inspection and report to the Council, and it was impossible to say what the consequent expenditure might be. For that reason he deprecated legislation in the direction proposed by Sir H. Pitman.

After some remarks from Dr. Smith,

Sir H. Pitman, in reply, said it was singular that the members who opposed his motion had not before discovered that the registration fee might be reduced. His proposal was not that money should be at once expended for scientific research, but only that a committee should be appointed to consider whether that course could be adopted. As to visitations, if any great improvement had taken place (as had been alleged) the necessity for them should be less rather than greater. The cost of a visitation was enormous; but the expense of researches such as he had mentioned would be comparatively small, and it would have, he contended, a distinct relation to the Pharmacopœia, and would therefore be strictly legal. It was a dereliction of duty on the part of the Council to be receiving large sums of money which it could not usefully employ.

Dr. Lyons moved as an amendment: "That a committee be appointed to consider and report in what way the accumulated funds of the General Medical Council can be best applied for the public good in conformity with the duties imposed upon the Council under the Medical Act."

Dr. Pettigrew seconded the amendment.

The President said he could not understand on what principle they were to conclude that if they had the power and the means they were not at liberty to inquire into the mode of action of those substances of which they were in the habit of prescribing doses. He also called attention to several previous meetings of the Council when similar proposals had been considered.

Dr. Storrar thought that if the proposed committee were appointed, it ought to have the power of consulting counsel on the legal aspect of the question. He sympathised with the object of the motion, but could not consent to an illegal expenditure of money.

The amendment was then put, and negatived. The original motion was also negatived by a considerable majority.

The following report was presented from the Finance Committee:—

The Finance Committee report that the income of the General and Branch Councils for the year 1884 (ending Dec. 31st, 1884) has been £8424 2*s.* 3*d.*, an amount which exceeds by £478 14*s.* 9*d.* the income for the year 1883. The expenditure during the year 1884 has been £7084 6*s.* 7*d.*, which is £2633 0*s.* 1*d.* more than the expenditure of 1883. The Committee has, nevertheless, the satisfaction of reporting to the Council that, notwithstanding the large expenditure during the past year, the excess of income over expenditure for the year 1884 amounts to £1339 15*s.* 8*d.* The excess of income over expenditure for the year 1883 was £3494 1*s.* As regards expenditure, the largest item of increase has been that for fees to members of the General Council, in consequence of the two sessions of the Council held during the year 1884. This excess amounted to £1580 1*s.* 10*d.* The fees to members of the Executive Committee also show an increase of £173 11*s.* 8*d.* The preparation of the new edition of the British Pharmacopœia has involved an expenditure on account of £358 12*s.* 2*d.*, and in general printing there has been an increase of £39 12*s.* 7*d.* The only items of diminished expenditure for the year 1884 claiming notice, as compared with 1883, are a decrease of £18 14*s.* 5*d.* in house expenses, and £13 14s. 6d. in the production of the Medical Register. While, therefore, the total increase of expenditure is £2310 7s. 1d., the total decrease amounts to £82 2s. 4d., showing an actual increase in expenditure of £2228 4s. 9d. The average yearly income during the last seven years exceeds the average yearly expenditure by £1617. In the receipts (£585 17s. 11d.) of the Dental Registration Fund for the year ending December 31st, 1884, there is a decrease of £82 6s. 5d. over those of last year, while the expenditure, £896 2s. 9d., has been greater by the sum of £151 4s. 7d. The deficiency of income for the year is thus £310 4s. 10d., as compared with a deficiency of £76 13s. 10d. in 1883. Pursuant to instructions given at the meeting of the English Branch Council in 1884, the treasurers have made an additional purchase of £2500 consols in the names of the trustees of the Branch Council, thus making a total invested under this trust of £23,000 consols. The total amount now invested by the three Branch Councils is £38,669 17s. With respect to the reference from the General Medical Council—namely, "To present a scheme which will render it necessary in future that the Branch Council for England should advance the money required to meet the current expenses of the General Medical Council,"—the Finance Committee recommend the following plan to be adopted in future:—1. That an estimate of the sum probably required for the current year's expenses of the General Medical Council having been made by the Executive Committee at their first meeting in each year, the proportionate rate to be paid by each Branch Council in order to provide such sum be made by that committee, and that the half of that sum be paid in January and July of each year. 2. That the sums paid by each Branch Council be placed to an account to be opened at the bank in the name of the General Medical Council. 3. That any balance remaining on this account at the close of each year, over and above what has been required for the expenses of the General Council for that year, be calculated in the estimate of the sum required for the following year; or should there be any deficiency, that the respective Branch Councils supply such deficiency computed on the percentage rate.

The report was received and adopted without discussion.

Mr. MARSHALL moved: "That it is desirable that the first principles of physics, chemistry, and biology should be regarded as branches of a preliminary scientific training and of an examination, to be taken before the commencement of purely professional study." He thought there could be no question as to the proposal he had submitted being within the powers of the Council under the Medical Act; indeed, he thought it absolutely necessary that the question should be taken up. A circular had been sent to a number of persons asking their opinion on the subject, and many answers had been received. A large majority were more or less favourable to the establishment of some sort of special preliminary scientific examination. Inquiries had been addressed to fifty-eight persons: nine had sent no reply; eight were decidedly adverse, chiefly on the grounds of additional expense of time, and of the inexpediency of encumbering the curriculum; eight were moderately adverse; thirty-four were more or less in favour of the proposal; twenty-three were absolutely in favour of some form of preliminary scientific education; three were in favour of such a preliminary examination as was expressed in the conjoint scheme of the Royal Colleges of Physicians and Surgeons; and seven were in favour of such an examination, but thought it could not be carried out at schools for general education. The evidence was strongly in favour of the proposal, and no apology therefore was needed for his introducing it. It would, if carried out, have the effect of relieving the professional curriculum. It might be objected that a heavier burden in time and money would be imposed upon the students, but he did not think that that was an objection that the Council had to consider. It was rather an objection to be made by the withdrawal of those who could not afford the necessary education. If the number of students had to fall off, it was better that they should do so early in their career than that they should go through a long period of medical education, and then be disappointed. It had been stated that the supply of medical men was inadequate to fill up the waste, but that was really not the case. Taking an average of nine years, the number of students annually registered had been 1842, and the number of practitioners registered in the same time was 1109, showing an antecedent waste of 733. That was a proof that a number of men entered into medical training who never passed into the Register. It might be asked, How was the waste supplied? The antecedent waste before registration was 733 a year. The working waste was 856, and deducting that number from 1109 (the number registered), there was a balance of 253, representing the number entered on the Register yearly in excess of the waste. The number of students registered in 1879 was 2009. It would take those students five years to get on the Register, so that they would appear in 1884. The number of practitioners then registered was 1388, so that the antecedent waste had been 621, and the balance, after deducting 615 who had died and retired, was 713. They therefore need not be alarmed as to the question of supply and demand. There were many poor-law medical officers breaking their hearts on a salary of £50 a year who might get £100 a year if the numbers in the profession were diminished. He doubted, however, whether the proposed plan would really increase the length of time during which a medical student would have to study. A sound preliminary training would enable the students to get through their professional curriculum more rapidly, and time would in that way be saved. Experience showed that those who had had that kind of training were more apt students in their subsequent career. He had been very much surprised, however, at an answer given by one gentleman who said that he had not found that those who had a preliminary scientific training were more apt in their professional studies. His (Mr. Marshall's) experience was just the reverse. But should the preliminary training be conducted at the schools? It would, he thought, be futile to expect from the schools a sufficient preliminary education in the fundamental sciences. The latest report from the examiners at the Cambridge local examinations gave them but little encouragement to expect a good scientific training in the general schools of the country. The work would probably be best done in the scientific division of the medical schools, and it should be done before the students were permitted to register. The subjects to be taught were the principles of mechanics, physics, chemistry, and biology. He meant by biology a general outline of the systems of plants and animals, especially the structure and functions of vegetable and animal tissues. His object was to raise the lower ranks of the profession; the higher ones would take care of themselves.

Mr. SIMON, in seconding the motion, said as the subjects of education increased the more incumbent it became to provide for methodical teaching, without which students would find the task before them an almost hopeless one. General scientific subjects should be dealt with before professional subjects; the latter would then be more quickly and easily acquired. That view was enforced in a report of the Committee on Professional Education in 1869, which he had himself drafted, and which was accepted by the Council without alteration. The time at present given to medical education, forty-five months, was generally admitted to be too short. It might be long enough for a student who had had a preliminary scientific training; but without such a training at least fifty months should be given. With such a regulation the schools would provide the necessary instruction, say, in May, so that the students might begin their medical course in October; but they would be at liberty to acquire their preliminary knowledge where and how they pleased.

Dr. PETTIGREW thought that chemistry was too important to be treated as a mere preliminary subject. "Biology" was a vague term; and the necessary amount of knowledge respecting it could hardly be obtained in the way proposed. He should not himself object to lengthening the period of medical education, but feared that it might interfere with the needful supply of practitioners. He thought that, at present, the subjects of the curriculum were too numerous, and that their number should be lessened in order that they might be more thoroughly learned.

Dr. BANKS said there were many men entering the profession who were quite unfit for it. There ought to be two different grades in the profession, and five years ought to be the minimum period of study.

Dr. HUMPHRY, in supporting the motion, said that there was a very general feeling expressed by the gentlemen who had answered the questions addressed to them, that a general scientific should precede a purely professional education. The great defect in education was in regard to the knowledge of principles, and if this defect could be supplied at an early period, the advantage would be enormous when the professional studies were undertaken. There were doubtless great difficulties in the way, but the appointment of a committee might lead to their removal. An expression on the part of the Council that the course proposed was "desirable" would be a useful preliminary step in dealing with the subject.

Dr. Storrar said that the principle of the motion was enunciated twenty years ago in a motion brought forward by himself. Something more should now be done, and he hoped that a distinct recommendation would be given to the examining bodies. The scientific instruction at most schools was quite inadequate, but there were notable exceptions. At Eton and Rugby, for example, science was well and practically taught. At Bedford there was a complete laboratory, and the scientific training was excellent. As a rule schoolmasters, knowing nothing of science themselves, did not care about its introduction, but if there was a demand for it, it would no doubt be well taught. With regard to biology, it was absurd to suppose that it could be taught from books alone, but there was no reason why it should not be taught practically in the schools. He hoped that no attempt would be made to exercise control over the qualifying bodies; the Council should be content with forwarding a recommendation on the subject.

Dr. Haughton thought that at least a year's preliminary scientific training should be required from the students.

Dr. Chambers said that the brains of boys at school were not sufficiently developed to receive chemical and biological instruction. The subjects were of a special character, and should be included in the later medical curriculum. He did not object to the addition, but it was made at the wrong end.

Mr. Teale thought the Council was mixing up general and professional education. The great object was that good training should be given at school, without reference to the particular subjects selected; and the more they tried to increase the subjects of early education the more likely they were to deteriorate it. The subjects referred to in the motion belonged to professional training, and should be so regarded. Dr. Michael Foster, in writing on the subject, had said: "I would not recommend a special preliminary scientific examination. In order to be adequate, it must be by special examiners, and the almost necessary consequence will be that it will become sooner or later too exacting." There was unfortunately a tendency to add to the curriculum before the question of time had been decided. Every examination added would, he thought, tend to deteriorate true medical study. He often heard complaints that men who had gone through their curriculum were not so well qualified to enter upon the profession as those who were turned out many years ago. The schools were being turned too much into cramming machinery, and any addition to the examinations would only increase the evil.

Dr. Scott Orr said that when examined by the Scotch University Commissioners he gave evidence almost identical with the views expressed by Mr. Marshall. It was not, of course, to be expected that the boys would get all the required information at the schools. Boys going straight from school to medical study often lost their first year; they did not know how to study, and had to be taught the preliminary lesson. It was scandalous that there should be so many rejections at the first examinations. By such an examination as Mr. Marshall proposed the unqualified students would be filtered out early, and the qualified ones would be better able to pursue their studies after their preliminary training.

Dr. Struthers said that examinations were not to be trusted without a regular education at a college or university. He suggested that the consideration of the subject should be deferred until the question of the curriculum had been settled.

Saturday, May 16th.

Sir H. Acland, President, in the Chair.

The adjourned debate on Mr. Marshall's motion was resumed.

Mr. Macnamara said that every member of the Council must sympathise with the earnest desire shown by Mr. Marshall that the important subjects mentioned in the motion should be thoroughly and carefully studied, but at the same time there might very well be a strong difference of opinion as to the mode in which that study should be carried on. The proposal seemed to be that those subjects should be taken previous to the commencement of professional study, and when once examined upon they were to be put on one side. No one who knew anything about the profession would under-estimate a knowledge of chemistry, and he could not approve of the suggestion that the examination in it should be passed before the student was registered; he would, however, be prepared to go the whole length with Mr. Marshall if it was to be subsequent to registration. Mr. Macnamara then gave a detailed account of the manner in which the several subjects were taught in the Royal College of Surgeons in Ireland, and expressed his regret that the Council had not taken up the recommendations first, dividing the whole course of study into sessions, and allocating to each its various subjects.

Dr. Watson was glad that Mr. Marshall had brought forward his motion before the discussion commenced on the arrangements for study and examination in future. The present curriculum was certainly over-weighted. Some students of more than average attainment might succeed in it within the forty-five months, but in most instances those who did so had had a preliminary education of a very different kind from that which was to be obtained at an ordinary school. Generally, their being able to pass within the allotted time was due to the fact that they had virtually entered upon what might be called the intermediate professional studies before they passed into the rank of medical students. Mr. Marshall's proposal to put certain things into the preliminary examination appeared a very valuable one, as it would tend in some way to relieve the curriculum. Chemistry was not slighted by being put into the preliminary, but the chemistry which Mr. Marshall alluded to was what must, under any circumstances, be acquired before further steps could be taken in that science. But the question arose, When and how could physics and biology be studied? In his opinion there was only one way in which that could be done—namely, in those schools where such subjects were really taught. If there was one thing that was bad for a medical student, it was that, even if he did not pass his examination, he should carry on his study in further subjects. It was of the very highest moment that anatomical studies should not be conducted at the same time with clinical studies, for if they were it would be difficult to avoid the risk of carrying septic germs into the anatomical ward. Chemistry and physics might easily be dealt with in the winter session, and zoology and botany in the summer session. From every point of view it appeared to him desirable that the resolution should be passed.

Dr. Scott Orr considered that more than one year's study would be necessary to enable the student to pass the examination proposed. If the curriculum was extended at all, it should be in the direction of professional study, and not of preliminary study. Mr. Marshall's proposal might be all very well for university students, but extra-mural students would find it extremely difficult to comply with this regulation. He could not see the propriety of relegating chemistry entirely to the preliminary course. It should be, as it had hitherto been, a part of the first professional examination.

Mr. Macnamara proposed as an amendment: "That it is desirable that the first principles of mechanics, physics, chemistry, anatomy, and biology should be regarded as branches of a preliminary scientific training, and of an examination to be taken at the end of the first year of professional study."

The motion was seconded by Dr. Pettigrew.

Mr. Marshall said there appeared to be a unanimous opinion that the schools could not be relied upon for a *bonâ fide* scientific preliminary examination. The object of school education was to educate the mind in the instruments to be used for the acquisition of knowledge. There was no objection to boys at school being allowed to indulge themselves in botany, zoology, and the natural sciences generally—indeed, they ought to be encouraged to do so; but he did not think that any examination which might issue out of a study of this kind should be seriously taken into account. No examination in such subjects at this early period could be considered adequate as an introduction to professional education. It was necessary that there should be interpolated a truly scientific training which should be preliminary to the study of the human body as it existed in life and disease, which was the ultimate object of medical science. The intermediate training to which he referred should include mechanics, physics, chemistry, and general biology. It had been said that chemistry was so important a subject that it could never be taught properly if it were separated; but he could not understand why it should not be taught even more effectually by itself than when the student was attending to his strictly medical studies. With regard to biology (a word to which he did not, like some members, object), the object should be to educate the student in the elementary principles connected with the structure and action of living things. The question was whether the course of scientific instruction should be introduced between the general education and the professional one. The main point was that it should be given before the student was allowed to be put on the Register. As to prolonging the curriculum, that was a question still hanging over them, and it would have to be dealt with hereafter. His own belief was that if the proposed plan were adopted, there would be as many students passing in the fourth year as there were now. The curriculum would have to be prolonged directly or indirectly. To prolong it directly was, he thought, objectionable. It would make some students lazy, and would not increase the chances of any.

Mr. SIMON said that all were agreed that before the commencement of professional study the reasonable competence of the students in the scientific subjects that had been mentioned ought to be ascertained. The question whether the term "professional," "preliminary," or "intermediate" should be applied to them was a trivial one in comparison with the essential question itself, which was that before anthropological specialities began the student should have some knowledge of mechanics, chemistry, physics, and biology. No doubt they would have to look forward to more time being required. How could it be otherwise? When some of them were young men the amount of scientific training required for men entering the medical profession was not more than was now required for the veterinary profession. He hoped that the Council would affirm the principle that before entering on medical studies the student should understand something of the attributes of the inorganic and organic world.

Dr. QUAIN thought that the treatment of disease had deteriorated. In consequence of the attempt to cram science down men's throats they had very little idea of good practice. It was absurd to suppose that the scientific knowledge now demanded could be acquired at school. The question was whether a five years' course should be required; and if so, how the time could be best spent.

The PRESIDENT said there could be no doubt that a scientific preliminary education, whatever it *might* be called, had become a necessity as an introduction to anthropological studies; and it was impossible that so much work could be put into the time at present prescribed.

Dr. LYONS was afraid that the medical student of the future would be in the position of Ginx's baby. He did not question the necessity of some such legislation as was indicated by Mr. Marshall's motion, but he was not sure that it would not be better to defer the consideration of the question until after they had taken up the question of the Council's recommendations. He thought that not less than two years' serious study would be required for a respectable knowledge of the first principles of physics, chemistry, and biology. Anything short of that would be practically useless. A two years' course would bring the student to the age of eighteen; and then nothing less than a four years' course would suffice for a thorough education in medicine, surgery, midwifery, pathology, anatomy, ophthalmology, and the other branches of which a full knowledge was required from the student before he was admitted to practise. That would bring him to twenty-two—the earliest age that should be allowed for admission. The two years' scientific preliminary training could be better given in one of the recognised universities, and it would, he thought (without committing himself definitely on the subject), be better to recommend the Legislature to establish a preliminary course in a university before admission to professional study. He hoped that the consideration of Mr. Marshall's motion would be deferred.

Dr. HAUGHTON thought that the Council was wandering from the real question, and discussing a great variety of details. The present regulations of the Council, to which the licensing bodies had assented, limited the period of medical study to four years, which included chemistry, physics, and biology; and they ought not to take the corporations and universities by surprise by passing Mr. Marshall's resolution without letting them know that it meant five years instead of four. If five years was the right time, let the Council say so. He for one would vote for it if the Council thought it right.

Dr. STRUTHERS said that a five years' course would be required if the preliminary scientific knowledge was not to be a mere sham. For himself he would far rather have medical students come to him well trained in classics and mathematics and knowing nothing about biology than have them come with a mere smattering of science. He should vote for the amendment.

The amendment was then put and rejected, 7 members voting for it and 10 against.

On the motion being put,

Dr. STRUTHERS moved as an amendment: "That the Council postpone its decision on the motion until it comes to decide on the questions of professional education and examination."

Dr. PETTIGREW seconded the amendment, which was put and rejected.

The original motion was then put, and on a show of hands there were nine in favour and nine against: but on the names being taken there appeared to be 9 in favour and 10 against, and it was accordingly declared to be lost. Three members did not vote.

Mr. SIMON moved: "*That the statements which have* been made to the Council, that the Council's accumulated funds amount to £38,000, and that the Council's annual income exceeds its annual expenditure by an average amount of £1600, be referred to the Finance Committee and to the Executive Committee; and that these Committees be instructed jointly to inquire, and jointly to report their opinion to the next meeting of the Council, whether the registration fee of £5 now charged to each person who enters the medical profession is more than enough to provide for the full efficiency of the Council in all its branches of duty, and whether the Council might properly proceed to make a reduction of the fee."

Mr. MARSHALL seconded the motion.

Dr. A. SMITH said that as three out of the four members of the Finance Committee were on the Executive Committee, he saw no reason why the matter should be referred to both committees.

Mr. SIMON said that Dr. Scott Orr, a valuable member of the Finance Committee, was not on the Executive Committee, and it was desirable to secure his services.

Dr. HAUGHTON had a strong objection to refer the matter to a committee; it was a question which the Council ought to decide itself. The benefit proposed to be given to the individual practitioner was infinitesimal, forty shillings once in his lifetime. It would be much better for the Council to keep its surplus so that it might be able to spend it on some useful objects.

Dr. STRUTHERS said that the money could be usefully spent on a more continuous visitation of examinations, and he proposed to move at a future sitting that the subject should be referred to the Branch Council to consider and report on it to the Council at its next meeting.

Dr. CHAMBERS considered that the money in the hands of the Council should be spent in such a way as to benefit those who had contributed it, and that to apply it to the reduction of future fees would be unjust to the old practitioners.

Dr. HAUGHTON moved as an amendment: "*That the* question of the reduction of fees on registration be now decided by the Council."

The motion having been seconded, was put and carried by 13 votes against 2.

Dr. HAUGHTON *then moved that the registration fee* remain *in statu quo*, and this, having been seconded by Dr. PETTIGREW, was also carried by a large majority.

Dr. CHAMBERS moved, "That the Council sanction the following decree passed by the Convocation of the University of Oxford, Feb. 24th, 1885:—'That no person shall be henceforward presented for the degree of Bachelor of Medicine who has *not* passed a qualifying examination, not only in medicine, but also in surgery and midwifery before the Examining Board for England, unless or until an examining board be appointed by the University for that purpose.' And that the Council also sanction the adoption by the Colleges of Physicians and Surgeons of England of the following resolution of the Committee of Management of the Examining Board for England of the said Colleges:—'That every member of an English university who shall have passed such an examination or examinations at his university as shall comprise the subjects of the first and second examinations of the Examining Board for England, and who shall have completed not less than four years of medical study according to the regulations required by his university, be eligible for admission to the third or final examination of the Board, two years after his having passed all the other required examinations.'" He said that by the 19th Section of the Medical Act any of the Colleges or bodies might, with the sanction and under the direction of the General Council, unite in conducting the examination required for qualifications to be registered under the Act; and he now applied for the sanction of the Council to a temporary arrangement made by the University of Oxford with the Conjoint Board of the Colleges of Physicians and Surgeons of England. The degree of B.M. conferred by the University was not a degree authorising the recipient to practise, but only to teach and lecture. The licence to practise was given separately. When the Act of 1858 was passed, the M.B. degree was made a qualification, and was admitted on the Register by the authority of the Council; the Council, therefore, was responsible for it. The University, in order to carry out loyally the direction of the Council, had gradually increased its standard of examination. Then came the recommendation from the Council that all persons who received a qualification should be examined in surgery and midwifery. The University thought that if it went on increasing its standard in medicine according to the improvements in education, it must also increase it in midwifery and surgery; but it was felt that that would be oppressive to the candidate. The difficulty might, it was believed, be overcome by the arrangement mentioned in the resolution.

Sir H. Pitman, interposing, said he thought that the Council had no authority to interfere in the matter, and that it was purely a question for the University of Oxford.

The President said that there was a legal question involved in the matter which had not yet been settled, and it was doubtful whether the Council had anything to do with it. Dr. Chambers, however, had acted quite rightly in bringing it before the Council, which he had done on his own responsibility.

The further consideration of the matter was adjourned.

Monday, May 18th.

Sir H. Acland, President, in the Chair.

On the adjourned debate on the motion for sanctioning the decree passed by the University of Oxford,

The President said his attention had been called to the fact that in the decree in question reference was made to the "Examining Board *for* England," there being no such body. It should be "the Examining Board *in* England."

Dr. Chambers, in resuming his address, said he had brought the matter forward as the representative of the Convocation of the University. The University had endeavoured to carry out the recommendations of the Council in regard to examinations in midwifery and surgery, and it was of opinion that such examination for Bachelors in Medicine would be best carried out in London. He asked for the sanction of the Council to the arrangement, without which the University might find itself in an awkward position, not knowing whether its examinations had been legalised or not. His attention had been drawn to the misdescription mentioned by the President. His belief was that the error was in the original decree; and in order that the error might be rectified, he would ask permission to withdraw his motion, on the understanding that he might be permitted to bring it forward again and discuss it on its merits.

Permission having been given,

Dr. Humphry gave notice that he should move that in order to prevent misunderstanding the representative of the University of Oxford be requested to make it known to the University that there is not, at the present time, any examining board for England.

The Council then went into Committee to consider the existing recommendations of the Council, and the proposed alterations, herein adopted by the Branch Councils for England, Scotland, and Ireland.

In Recommendation 19, "the age of twenty-one shall be the earliest age at which a candidate shall obtain a licence to practise, and the age shall in all instances be duly certified," no alteration was proposed by the English Branch Council.

Dr. Haldane, on behalf of the Scotch Branch Council, moved the substitution of the word "should" for "shall," urging that the former word was more appropriate to "recommendations," which had not the force of actual laws.

Dr. Haughton seconded the motion.

Mr. Simon thought that a distinction should be drawn between opinions of the Council that were imperative (such as those relating to the earliest age for admission) and the opinions that were merely the subjects of recommendation. The former, he thought, should take the form of standing orders.

Dr. Watson supported the motion, which was put and agreed to.

Dr. Banks moved "That the age of twenty-two be the earliest age at which a candidate shall obtain a licence to practise." If, he said, the question of age were considered after the question of the curriculum had been disposed of, he thought there would be a general consensus of opinion in favour of his motion. He was not alone in the opinion he had formed; for the King and Queen's College of Physicians, Ireland, had recommended that no candidate should be admitted to practise before attaining the age of twenty-two; and Sir Wm. Gull had recommended twenty-three as the earliest age. He (Dr. Banks) had brought the subject forward on a previous occasion, and at Mr. Simon's suggestion it was postponed until the subject of medical education was under discussion. They had had abundant evidence that the period of forty-five months, or even four years, was too short for an efficient education; and the result was that a number of immature youths had been admitted into the profession. If eighteen were the minimum age for admission to the Register, that would answer the purpose equally well.

Dr. A. Smith seconded the motion, which, on being put, was rejected by a large majority, there being only two votes in its favour.

Dr. Watson moved the omission of the word "duly" before "certified," regarding the word as meaningless. He said that the affidavit of the candidate himself as to his own age was accepted as a sufficient certificate.

The motion was seconded by Dr. Pettigrew and agreed to.

In Recommendation 20, "No licence shall be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the candidate as a medical student,"

Dr. Haldane proposed to add the words, "and his commencement of study at a medical school." The object of the addition, he said, was to prevent candidates from being registered who had merely become pupils of a registered practitioner. The Scotch Branch Council was aware that in a number of cases students had availed themselves of that mode of commencing medical study, and in that way a year or more had in some cases been deducted from the period of education.

Dr. Fergus seconded the motion.

Mr. Macnamara said it was felt by the Irish Branch Council that the work with a registered practitioner was a sham. They accordingly proposed that the recommendation should read, "No licence shall be obtained at an earlier period than at the close of the attendance on four winter and four summer sessions of medical study subsequent to the registration of the candidate as a medical student."

Mr. Macnamara's speech was interrupted by the announcement of the President that the hour had arrived when, according to arrangement, the Council had to consider the case of a medical practitioner summoned to answer the charge of having caused to be registered in the Medical Register a qualification which he did not possess. This case (that of Ebenezer Bryceson) was considered in private, and occupied nearly the remainder of the sitting, being then postponed for further consideration on Thursday. It wanted only a few minutes to the hour of adjournment when strangers were readmitted, and it was then considered too late for Mr. Macnamara to resume his speech. The remaining time was accordingly spent in the transaction of some formal (chiefly dental) business.

Sir H. Pitman said it had been thought desirable to reconsider the standing orders with reference to penal measures, as to which there was at present no very clear mode of procedure. Such cases were becoming more frequent and more difficult to deal with, and it was desirable that the rules respecting them should be more exact. He moved: "That the Executive Committee, with the assistance of the legal advisers of the Council, be requested to revise

Sections 11, 12, and 14 of the standing orders having reference to penal measures, and to make at the next meeting of the Council such recommendations as they may think fit for amending the same."

Mr. SIMON seconded the motion, which was agreed to.

A communication was received from the Lord President of the Privy Council, enclosing a copy of a petition of Mr. E. Wooton, praying that his name might be entered in the Register as a dentist. The communication was ordered to be entered on the minutes.

Mr. MACNAMARA asked if the matter would be brought on for discussion.

Sir H. PITMAN said there was nothing to discuss. The petitioner, who had presumably been in practice before the passing of the Dentists Act, now asked to be registered, the time given by the Act having long since expired. That of course would be quite illegal.

A communication was received from the University of Pennsylvania (Department of Dentistry) asking for the recognition of its diplomas. After a short discussion as to the character of the course of study at the University (which Sir H. Pitman said had been decided by the Council to be below the required standard), the matter stood over, at the suggestion of Dr. Haughton, for further inquiry.

The Council then adjourned.

TUESDAY, MAY 19TH.

SIR H. ACLAND, PRESIDENT, IN THE CHAIR.

The debate on Mr. Macnamara's motion on Recommendation 20 was resumed.

Mr. MACNAMARA said it was strongly believed by the Irish Branch Council that four years of professional study were essential. The subject was more important than all the other recommendations put together, and if they did not take a firm stand upon it, it would be a sad thing for professional education. What had the Council done to promote the study of the numerous essential subjects named in their recommendations? They had decided that it could all be included in twenty-four months' study in a school; but would anyone gravely maintain that an adequate education could be given in all those subjects in so limited a period? He had not forgotten that by another regulation a year and a half of study could be carried on under a general practitioner. One subject on which the Irish Branch Council felt strongly was the subject of unqualified assistants. Students who had not completed their curriculum, or had not obtained any qualification, were allowed to go to a general practitioner for a year and a half, and that time might be accepted as a portion of the four years. The student, unqualified as he was, might even visit the sick poor or people of higher rank. In Ireland no such thing could happen. He had served his time as a dispensary doctor for some years, and if he had attempted to send one of his apprentices to visit a poor patient he would have been summoned before the board and summarily dismissed. He maintained that four winter and four summer sessions were little enough in which to teach subjects of so important a character. If the resolution proposed by Mr. Marshall, that the preliminary scientific subjects should be taken before the commencement of purely professional study, had been carried, the Council might then have been in a position to state that three winter and two summer sessions would suffice. With a view to making the recommendation as definite as possible, he begged to ask permission to substitute for the original motion the following: "That Recommendation 21 should be as suggested by the Irish Branch Council, that the course of professional study required for a licence shall occupy at least four years, of which four winter and four summer sessions shall be passed in any school recognised by any of the licensing bodies in Schedule A of the Medical Act."

Mr. COLLINS, in seconding the motion, said there could be no doubt that twenty-four months of medical study were insufficient for a student entering the medical profession. As to the study under a medical practitioner, in the majority of cases it was of very little value. A large number of practitioners would be unwilling to give the necessary instruction, and a still larger number of students were unwilling to receive it. After a long course of general practice, he could himself say that he had only had one pupil who was willing to receive the instruction that he (Mr. Collins) was able and willing to communicate. He had offered to prepare them in the [illegible], but he could not get them to read; generally they preferred newspapers or novels.

Sir HENRY PITMAN said that Recommendation 21 required four years' professional study. The Irish Branch Council recommended that there should be four winter and four summer sessions. The question really was where the four years were to be passed. Hitherto it had been stated that at least three winter and two summer sessions should be passed at a medical school, leaving it to the discretion of the student to remain the whole time at the school or to spend some portion of the time with a registered practitioner.

Dr. HAUGHTON suggested that, as the Irish Branch Council accepted the Scotch proposal as far as it went, Mr. Macnamara should withdraw his motion in its favour, and bring forward the Irish proposal in connexion with Recommendation 21.

Mr. MACNAMARA assented to that course, and obtained permission to withdraw his motion.

Dr. HALDANE said that the Scotch proposal, which he moved, was: "No licence should be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the candidate as a medical student, and his commencement of study at a medical school."

Dr. BANKS said he wished to move as an amendment (as suggested by the Royal College of Physicians, Edinburgh): "That the curriculum should extend over five years." There was, he said, a large body of opinion in favour of that proposal, and there was a very general feeling that the period of four years was not sufficient. It appeared from a return of the University College that only 23 per cent. of their candidates passed in four years. With one exception, the period of study required in England was shorter than that required in any other country. The period in Holland was seven years; in Sweden six or seven, and sometimes ten; in Denmark two years scientific and five medical; in Norway seven years; in Belgium seven years, sometimes six, and exceptionally five; in Russia five years; in Turkey six years; in Greece five years; in Italy there was no law, but the customary period was six years; in France six years for university study and examination. It was within his own experience that the period of four years was insufficient. Clever and industrious young men who passed the examination at the end of forty-five months were often so conscious of their unfitness to begin practice that they sought for a residentship in a hospital, or endeavoured to obtain instruction elsewhere, so as to be prepared to enter professional life. The recommendation of the Royal College of Physicians, Edinburgh, which had his hearty concurrence, would, he thought, commend itself to the Council. He knew what the arguments were against any prolongation. One gentleman had stated that the time at present required was as much as the student's social and pecuniary condition would allow. He (Dr. Banks) thought that they ought not to increase the facilities for entering the profession. It was, on the contrary, desirable to extend the period, and make the examination more stringent and expensive. His remarks, of course, did not apply to the universities. In the university which he represented the earliest age at which students entered was seventeen, and it was very improbable that less than five years could be passed in scientific and professional education.

Dr. HAUGHTON seconded the motion, adding that there was no chance of carrying it.

Dr. HALDANE said that, although he was personally in favour of a minimum of five years, he could not vote for it since he was, as the mover of the motion, the mouth-piece of the Scotch Branch Council, which had not adopted the proposal.

Mr. SIMON said that the question was virtually the same as that which the Council had refused to settle on Saturday. When Dr. Banks spoke of five years he no doubt intended that the studies of physics, chemistry, &c., should be included in that period. If so, a great deal might be said in favour of the motion. But if it was the intention that the whole period of forty-five months should be spent at a medical school, however desirable it might be for the student, he thought it would be retrograde legislation. If it could be safely said that there was no part of the medical curriculum that the student could acquire elsewhere than at a medical school, by all means let there be an absolute rule that the whole period should be spent at a medical school. But if it might be assumed that certain parts could be learned elsewhere, they had no right to make a rule of that description. In fact, it would be a tyranny. His view of

Dr. Banks' amendment depended upon what arrangement was made as to the preliminary scientific subjects. His own opinion was that those subjects should be passed before the commencement of purely medical study. The best course, he thought, would be to have a few words at the end of the existing regulations to the effect that no licence should be obtained at an earlier period than after the expiration of forty-five months subsequent to the registration of the student, and subsequent to his having passed an examination in the first principles of chemistry, physics, and biology. If those subjects were cleared out of the way, the period of forty-five months would be equal to Dr. Banks' five years.

Dr. HAUGHTON said that Mr. Simon was endeavouring to revive a corpse. The question had been decided on Saturday. He himself agreed that a five years' curriculum was the best mode of accomplishing the object.

Dr. BANKS said he was willing to modify his amendment by requiring that the first year should be devoted to pre-professional training. Personally he should prefer six years to five, but perhaps that would not be tolerated.

After some further conversation as to the wording of Dr. Banks's amendment, it was submitted as follows: "That the course of study for registration, if including elementary mechanics, physics, chemistry, and biology, should occupy at least five years."

Dr. DUNCAN said that the amendment could not be adopted because the Council had already arranged a curriculum and an examination that were inconsistent with it. The preliminary examination was fully laid down in print, and would come into operation on October 1st.

Dr. QUAIN suggested that the new arrangement should come into operation two years hence.

Mr. SIMON said that the question as to when the regulations should take effect was a matter for subsequent consideration.

Dr. HUMPHRY said he supposed that forty-five months would still be considered sufficient if the candidate possessed an adequate knowledge of elementary mechanics, physics, &c., previous to registration.

Dr. QUAIN thought it would be better to fix the period and decide afterwards as to the subjects of study and how they were to be taken. The Council had decided twenty years ago that no licence should be obtained at an earlier period than after the expiration of forty-eight months subsequent to registration; and also that the examination in physics, botany, and natural history might be undergone at an earlier period than the first professional examination.

Dr. HAUGHTON: They had not discovered "biology" then.

The PRESIDENT said it was true that the Council had considered the matter twenty years ago, but now, after a long experience, it was thought desirable to reconsider it in the light of that experience, with a view of making any alteration that might be deemed necessary.

Dr. BANKS said that in former times, when there was not so many subjects in the curriculum, a five years' course was required.

The discussion was adjourned, and the remainder of the sitting was occupied by the consideration (in private) of the case of Daniel Sutherland, who had been summoned to appear before the Council.

The following extract from the printed Minutes shows the business transacted during the absence of the representatives of the press:—

Moved by Dr. HERON WATSON, and seconded by the Rev. Dr. HAUGHTON: "That the Council proceed to consider the case of Daniel Sutherland, who has been summoned to appear before the Council, and to deal with it in accordance with Clause 29 of the Medical Act."

Amendment, moved by Dr. LYONS: "That the further consideration of Daniel Sutherland's case be adjourned for the space of one calendar month, in order to give him time to prepare such defence as he may be advised to do against the serious charges now laid against him; and that Mr. Farrer be instructed to communicate this notice to him without delay."

On the motion of Dr. LYONS, seconded by Sir HENRY PITMAN, the debate was adjourned until the next day.

Strangers having been readmitted, the Standing Orders were, on the motion of Sir HENRY PITMAN, suspended until the completion of the business before the Council.

Moved by Dr. HUMPHRY, seconded by Mr. MARSHALL, and agreed to: "That with reference to the motion by Dr. Chambers, respecting a decree passed by the Convocation of the University of Oxford, Feb. 24th, 1885, in order to prevent misunderstanding, the representative of the University of Oxford be requested to make it known to the University that there is not, at the present time, any Examining Board for England."

Moved by Sir HENRY PITMAN, seconded by Dr. SCOTT ORR, and agreed to: "That the following communication from the Faculty of Physicians and Surgeons of Glasgow be received and entered on the Minutes:—

'April 25th, 1885.

'SIR,—I am directed to transmit to you a copy of the subjoined resolution of this Faculty, passed at the ordinary meeting held on 2nd March, ult., and confirmed at the ordinary meeting held on the 6th inst.

'I am, Sir, your obedient servant,
'ALEXANDER DUNCAN, Secretary.

'W. J. C. MILLER, Esq., B.A.,
'Registrar of the General Medical Council.'

"Moved by Dr. Yellowlees, seconded by Professor Gairdner, and unanimously agreed to: 'That in the opinion of this Faculty instruction in insanity should be made compulsory in medical education; and that an expression of this opinion be transmitted to the General Medical Council.'"

(It will be observed that the Minutes state that after the case of Sutherland was adjourned strangers were readmitted. No intimation, however, was given to the representatives of the press who were in attendance that the Council was in open session, and hence no report was taken of the subsequent proceedings on Dr. Humphry's motion respecting the decree of the Convocation of the University of Oxford.)

WEDNESDAY, MAY 20TH.

SIR H. ACLAND, PRESIDENT, IN THE CHAIR.

The PRESIDENT said he desired to make a personal explanation. He wished to express his regret that on the occasion of the motion of Dr. Humphry on the previous day he had not taken the opportunity of drawing the attention of the Council to the matter. He had no idea that Dr. Humphry was in earnest in bringing the motion forward. It would be remembered that the Council had been in very serious and difficult discussion on legal business. They were on the point of breaking up, and the members were in movement, when Dr. Humphry proposed his motion, which was, in fact, a vote of censure on the University of Oxford. In the peculiar position in which he (the President) stood towards the University, it was manifest that he should say nothing in its defence or explanation concerning it, and he should therefore call on the representative of the University to make any observation that he might desire to offer. But, in fact, he did not take the matter *au sérieux*, and he allowed it to pass, the motion being carried without any observation. He would not go into the merits of the case, except to say that the University of Oxford had for many years done its utmost to develop education in the direction it thought fit, with express regard to the action of the Medical Council and to the interests of the country. Its desire was not to fly in the face of the general endeavours of the Legislature to establish combined examinations, and not to fly in the face of the general sentiment of the country by multiplying qualifying titles and diplomas. Acting in good faith, it had decided that it would in its educational arrangements accept the examination of a certain body composed of eminent persons in the metropolis; upon which, without any discussion or observation, a message was ordered to be sent to the University, having reference to a decree which it had passed in a loyal spirit, that there was not at the present time any "Examining Board for England." He was sorry that Dr. Humphry was not now present. What was the meaning of the communication to the University he could not, as president, state. All that he could say was that the motion had been moved by Dr. Humphry, seconded by Mr. Marshall, and passed without observation. It would have been well if the representative of the University had ascertained precisely what the University had done. He had not seen Dr. Chambers, but he had himself telegraphed to Oxford to ascertain the exact words of the decree in question, and he had been informed that the words were "the Examining Board *of* England.' That was not right, for the words should be "*in* England." As a matter of fact, however, the University had not used the words mentioned in Dr. Humphry's motion. If there was anyone to blame it was himself for not being quick enough, in the confusion just before the Council adjourned, to call attention to the matter. He could not suppose that so curt a rebuke upon somebody unknown was to be made, and so the thing passed. He was sorry that he had not been quick enough to call Dr. Humphry's attention to the subject, and ask him to defer it until further information had been received.

Dr. HAUGHTON said it would be remembered that the transaction occurred within a few minutes of the hour of adjournment, at a time when the Council did things that it would not think of doing at any other period of its sitting. There ought now to be an appeal from Philip drunk to Philip sober. He presumed that Dr. Chambers, when moving for the Council's sanction to the decree, was referring to the conjoint scheme of the Colleges of Physicians and Surgeons.

Mr. SIMON hoped that the President would confer with Dr. Chambers and Dr. Humphry, with a view of bringing about a satisfactory arrangement. The motion was not irregularly passed, although it was quickly disposed of, the chairman of the Business Committee moving the suspension of the standing orders for the purpose. He hoped that the President would allow the matter to drop for the present.

Mr. MACNAMARA said that the suspension of the standing orders was moved *sotto voce*, and in such a hubbub that the proposal did not reach him; otherwise he should have objected to it.

Dr. CHAMBERS said that he had made a mistake in the description of the Examining Board. He believed its full title was "The Examining Board in England of the Royal College of Physicians, London, and of the Royal College of Surgeons of England."

Mr. MARSHALL said that as he had seconded Dr. Humphry's motion, some explanation might be expected from him in Dr. Humphry's absence. The object of the motion was merely to correct an error that had been made, and not to propose a vote of censure. It did not appear to him that the matter was very serious; but if it was so regarded by the President, he would give notice of motion that the Council should leave it to the discretion of the representative of Oxford to make the communication in any way he liked.

Dr. DUNCAN said there was no such body as "The Examining Board in England."

Sir H. PITMAN: It is "*an* Examining Board in England."

Dr. DUNCAN: Everybody knows what is meant; it is the Conjoint Board of the two Colleges.

The PRESIDENT: We must ask the representative of the University to communicate to them the full title of the Board. Of course, if Dr. Humphry's motion had been simply a request to the representative to point out that the expression used in the decree was not an accurate description of the Board, and that it should have been so-and-so, there would have been no objection. But this curt message is such as to startle anybody.

Dr. QUAIN: All that Dr. Humphry meant to do was to correct an inaccuracy.

The matter then dropped.

Sir HENRY PITMAN: When the Council rose yesterday I felt it my duty as Chairman of the Business Committee to look back and see what we had done during the last eight days, and also to look forward and see what we had to do during the few days that remain of this week. I am sure no one would desire that we should sit into next week. On looking at the programme I do not suppose anyone is sanguine enough to imagine that we can get through the business before us this week. We have forty-five distinct questions on these reports by the Branch Councils alone, and there are other questions besides. To-morrow will be in part occupied by a legal case, and then there will only remain Friday and Saturday; and I feel persuaded that if this business is got through it will be done in so hasty and unsatisfactory a manner that it will bring some discredit upon the Council. Therefore I venture to suggest that, after what fell from our solicitor yesterday as to what ought to be the notice given to Daniel Sutherland for his appearance here, we should not commit even the appearance of an act of injustice, but give him fair notice and time for his defence

Dr. WATSON reminded Sir Henry Pitman that the reporters were present.

Sir HENRY PITMAN: Then I will abstain from any further remarks upon the legal question; but in regard to the time at our disposal I think after conference with the President, who agrees with me, that it would be far better to have a short session before the year expires, and that all such legal cases should be submitted to that session. We shall then get on as far as we can with the business programme of to-day, and anything which may be left unfinished, and I am satisfied that there will be much left unfinished, might also be taken at the next meeting. I think it my duty to state these facts to the Council.

Mr. SIMON said he could not quite share the pessimist views of Sir Henry Pitman. There appeared to be one or two really difficult questions in connexion with the recommendations, one of which was almost decided on the previous day, and when that question was decided the remaining business, he thought, was not more than might be got through during the present week. It would be much more convenient to get the business through during the present week than to have an indefinite future appointment.

The PRESIDENT then read a letter which he had received from Sir Henry Pitman embodying the substance of his verbal communication to the Council as to the time occupied by legal business, and asking permission to take the opinion of the law advisers of the Crown as to the readiest mode of carrying into effect the penal clauses of the Medical Act.

The Council then proceeded to consider in private the case of Daniel Sutherland, who had been summoned to appear before it under Clause 29 of the Medical Act.

On the readmission of strangers, the Registrar announced that, having heard evidence and considered the defence of Daniel Sutherland as stated in his letter of May 13th, the Council resolved and adjudged him, after due inquiry, to have been guilty of infamous conduct in a professional respect, and, further, directed his name to be erased from the Register.

The adjourned debate on the reports by the Branch Councils in regard to the recommendations was resumed.

Dr. BANKS submitted his amendment to Dr. Haldane's motion in the following form: "That the course of medical study after registration should occupy at least five years, if the subjects of elementary physics, chemistry, and biology are included in that period, or at least four years if a satisfactory examination in these subjects has been passed previous to registration."

Dr. STRUTHERS, in supporting Dr. Haldane's motion, said he was strongly of opinion that four years of genuine study were sufficient, and that a fifth year would be a tax on ability and industry, keeping back the better-class of students. An average man, if industrious, could complete his course satisfactorily in four years. Many of the physicians and surgeons who had sent in their answers to questions addressed to them had declared their opinion that a period of four years was ample. Some said that four years were not enough. Not enough for what? Of course not enough to make consulting physicians or surgeons; but that was very different from simply entering on the practice of the profession. In Germany the period was four years, and during the whole of the first year the student was working at chemistry, zoology, mineralogy, and natural philosophy, the first examination taking place at the end of the second year. The French system was also an example in favour of Dr. Duncan's proposal.

Dr. DUNCAN said there was not much difference in the two proposals, but Dr. Banks' amendment overturned the decision of the Council as to the preliminary subjects, and he should therefore vote against it.

Dr. PETTIGREW supported the motion, and said he thought it would be very foolish to keep back industrious and intelligent youths and encourage lazy ones by extending the period to five years. He hoped that the Council would see its way to adopt that recommendation, and would be careful to introduce only such subjects as were fundamental and necessary. The students ought to have fewer subjects and more time to reflect as they proceeded with their education.

Dr. WATSON said he objected to Dr. Banks' amendment because it did not compel the student before beginning his professional study to put behind his back the subject of systematic chemistry, neither did the arrangement compel the students to pass an examination in systematic chemistry at the end of the first session, but he would be permitted to carry it on to a period in the course of his curriculum in which the study of it would seriously interfere with the study of such matters as anatomy and physiology. If a period of forty-five months were properly made use of it ought to afford abundant time for the student to acquire the kind of formal systematic knowledge which was all that could be really expected from him.

Mr. Simon, in supporting the amendment, said he could not see in the Scotch motion any security for getting in the purely medical education the desired relief from the preliminary subjects. If the professional curriculum was to be weighted with the elementary subjects five years would be wanted to do justice to it. The amendment permitted an alternative of four years with the understanding that an intermediate examination was passed before the strictly professional studies commenced.

Dr. Banks referred to the case of Austria, where a period of five, six, and sometimes seven years was required, and cited Billroth's figures to that effect. Almost every young physician in England found it necessary to prolong his studies beyond the four years before commencing practice. The Scotch bodies were not unanimous in regard to their recommendation of four years, the Royal College of Physicians, Edinburgh, recommending five. At the Royal College of Surgeons, England, only 23 per cent. of the candidates obtained their diploma in four years.

Mr. Marshall recommended that the matter should be delayed, with a view of obtaining more unanimity on the subject. He was willing to accept the alternative provided in Dr. Banks' amendment, for there ought to be a certain flexibility in the arrangement, and it ought not to be too strictly enforced on the corporate bodies. Hospital authorities would not allow a house-surgeon to be appointed unless he was qualified, and if a man were not allowed to qualify until he had had an additional year of study a hardship would be inflicted on the student.

Dr. Humphry thought the Council should be careful not to extend the minimum period of education too much. The question was whether the period assigned was sufficient to enable a student to obtain a fair knowledge. Fifteen per cent. now passed into the profession in the assigned period, and they ought not to be prevented from earning their livelihood. He did not suppose that any of the licensing bodies would at once alter their arrangements.

Mr. Teale considered it important not to choke up the minimum examination to be passed in four years. In the Leeds Infirmary there were four persons under the house-surgeon who used to be called assistant resident medical officers. Until recently they were students who had passed all the requisite examinations, but had not obtained any qualification. Four or five of the best students were always competent for such appointments; but a year and half ago it was decided to appoint only qualified men, and the result had been that only on one or two occasions since had students from the infirmary school competed. He was inclined to vote for the modified, elastic proposal by Dr. Banks; it would still be open to the licensing bodies not to adopt it at once if they did not see good reason for it.

The amendment was carried by 11 to 8, and was also agreed to as a substantive motion.

The following foot-note was agreed to without discussion:

"*Exception may be allowed in the case of* any graduate in Medicine of an Indian, Colonial, or Foreign University, or of any student who, having completed the full time required by the Medical Council, and having given satisfactory evidence of general education, shall have spent the whole or three-fourths of that period at an Indian, Colonial, or Foreign University, the several licensing bodies being requested to communicate to the Council annually, in the month of January, a statement of the action taken by them respectively during the last preceding *calendar year in regard to such exceptional cases.*"

The following existing Recommendation was then considered:—"The course of professional study required for a licence should occupy at least four years, of which four winter and three summer sessions should be passed at any school recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act."

Sir H. Pitman moved: "That the Recommendation be as follows:—'At least three winter and two summer sessions shall be passed at some school or schools recognised by one or more of the licensing bodies.'"

Mr. Simon seconded the motion.

Dr. Haldane moved as an ammendment: "That the recommendation be as follows:—'At least four winter and three summer sessions should be passed at any school recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act.'"

Mr. Macnamara seconded the motion. He maintained that the subjects were so extensive, and the examinations so searching, and in some respects so practical, as well as theoretical, that the time mentioned in the amendment was the least that should be required if the student was to be adequately instructed.

The debate was then adjourned, and the remainder of the sitting was occupied with the transaction of some formal dental business.

Thursday, May 21st.

The debate on Recommendation 21, respecting the time to be passed by the student at a recognised school, was resumed. Before it concluded, the Council proceeded (in private) to the further consideration of the case of Ebenezer Bryceson, which occupied nearly all the remainder of the sitting. On the readmission of the public, it was announced that the Council had decided that Ebenezer Bryceson had been guilty of infamous conduct in a professional respect, but did not, under all the circumstances, now direct his name to be erased from the Register. The Council then adjourned. It was stated that the sittings would not be prolonged beyond Saturday.

THE
PRELIMINARY SCIENTIFIC M.B. EXAMINATION.

The revised regulations for the above examination at the University of London have just been issued. The examination will take place twice a year, once for Pass and Honours, commencing on the third Monday in July, and once for Pass candidates only commencing on the third Monday in January. Candidates for the Pass Examination will be allowed to take all the three subjects of the examination—(*a*) inorganic chemistry, (*b*) experimental physics, and (*c*) general biology—at the same examination, or to take them at two separate examinations—that is to say, two subjects at the First Examination for which they may enter, and one subject at the Second Examination; or, reversely, one subject at the First Examination, and two at the Second. At the July Examination candidates have the option of entering for a Pass or Honours in inorganic chemistry and experimental physics; but they cannot take up Honours in botany and zoology unless they have entered for the whole examination, including—that is, a Pass in general biology. In chemistry and physics no candidate will be allowed to take both the Pass and the Honours papers in the same subject; but if he enter for Honours and fail to obtain them, he may be recommended for a Pass in those subjects provided he has shown a competent knowledge. The examiners will make no report upon the examination for Honours of a candidate who has failed in any part of his Pass Examination.

A detailed syllabus of the subjects required in a Pass Examination is given, and also of the subjects required in the Zoology Honours Examination. The following are the requirements for a Pass in general biology:—

The elements of vertebrate morphology and physiology as exemplified by the rabbit, the fowl, the pigeon, and the frog. The description of the external form and the nomenclature of the parts of these animals. The leading resemblances and differences in the plans of structure of the three. The chief features in their osteology, with especial reference to the skull and limbs, and the visceral anatomy of each, including the general structure of the brain, the spinal cord, and the sense organs. The histological character of blood, epidermal and epithelial organs, connective tissues, cartilage, bone, muscle, and nerve in these animals. The characters and mode of formation of their ova and spermatozoa. The chief stages of the development of the frog, fowl, and rabbit. The nature of the placenta in the latter. The structure and life history of astacus, lumbricus, helix, distoma, hydra, vorticella, and amœba. The elementary morphology and physiology of the flowering plant. The description of its external form. The leading modifications in the structural plan of the flower. The leading types of fruits; the modifications by which floral organs take part in their structure. The histological characters of the growing point both in stem and root; the mode of origin and leading characters of epidermal, fibro-vascular, and ground tissues. The development of foliar organs and of the branches of stem and root. The mode of origin, structure, and ultimate development of ovules and of pollen grains. The mode of development of the embryo and of the endosperm. The distinctive facts in the life history of pinus. The structure and life history of a fern, a moss, chara, fucus, penicillium, spirogyra, mucor, protococcus, saccharomyces, bacterium. Practical examination (six hours). Each candidate must be prepared to examine microscopically, to dissect, and to describe, specimens of the animals and plants referred to in the preceeding syllabus.

There is also a practical examination in chemistry, comprising qualitative analysis of the more commonly occurring bases and inorganic acids, in solutions containing one of each. A list of reagents and apparatus provided for this examination is appended.

The regulations, although issued too late to appear in the current volume of the University Calendar, will come into force at once; or rather candidates, who so desire, will be allowed forthwith to take advantage of the changes introduced in the revised regulations.

THE LANCET.

LONDON: SATURDAY, MAY 23, 1885.

DURING the past fortnight the agitation for increasing the facilities for obtaining degrees by students educated in the London medical schools has been steadily progressing. On one point all are agreed—namely, that industrious students of average ability and sound professional attainments are placed at a great disadvantage if they elect to pursue their full curriculum in the metropolis. In spite of what we may perhaps venture to call the best professorial and teaching staff and the greatest clinical opportunities that can be found anywhere, students are debarred from entering the London medical schools, and are driven elsewhere by the want of facilities in obtaining degrees. At the present time a degree is not only the object of legitimate ambition of a well-informed student, but, owing to the multiplication of universities and the easy terms on which it can be obtained in most university centres except the metropolis, it has a distinct commercial value to the practitioner, and this is being recognised more clearly year by year. The question, then, of how a similar advantage can be fairly secured to the London as to the provincial student is most pressing, and one which London teachers and educational authorities are anxiously considering and endeavouring to answer. In a multitude of counsellors there may be safety, but just now chaos reigns supreme, and all kinds of solution of the difficulty are being proposed and eagerly pushed into prominent notice. The practical methods of solving the problem are very few, and may readily be pointed out. The University of London is naturally the first institution to which we must turn. But the prejudices in favour of the vested interests of the present holders of its medical degrees and the traditions of the University will, in spite of all appeal, oppose any such levelling as is contemplated in the idea of a degree for average students. We have always contended that the University of London has mistaken its true function, and has sacrificed its real position as the centre of metropolitan medical education and the *alma mater* of London students, to the lesser aim of maintaining a high examination-standard, and of only numbering a select few among its graduates. Indeed it was only after a long struggle, and in the most grudging spirit, that the slightest departure from its ancient *rigid* regulations has been conceded. The Vice-Chancellor, at the recent presentation for degrees, intimated that little else than some slight modifications in its *entrance* examination would be done by the Senate to meet the popular demand. The degrees of this University, according to Sir JAMES PAGET, must only be obtained by showing a greater amount of medical knowledge than is required by any other degree-granting body. The prestige of its degrees must be steadily maintained. That this isolated position is not held by all the members of the Senate and graduates is well known, and is clearly shown by the action of Lord Justice FRY'S Committee of Convocation; but much pressure, and a steady infusion of educational reformers into the ranks of the Senate will be required before they are likely to be induced to depart from this standpoint; and the life tenure of its senatorships, aided by Crown nominations, is a grievous difficulty in the way of any real reform. All we can expect is petty tinkering and some small modification of the existing regulations. Seeing this, those who are anxious that all impediments should be removed from a medical student's career in London have turned their attention to the great corporations of the Royal Colleges of Physicians and Surgeons, and the recent fusion of their examinations has made the moment a most favourable one. On his recent re-election as president, Sir WILLIAM JENNER suggested that this question of degree-granting should be inquired into by the two Colleges; and last week the Council of the College of Surgeons, by a unanimous vote, appointed seven of its most influential members as delegates to meet a similar number from the College of Physicians, and confer as to "what steps, if any, can be taken to enable the two Colleges to obtain the legal right of giving the title of 'Doctor' to persons who shall have obtained the licence of the Royal College of Physicians of London and the diploma of the Royal College of Surgeons of England." This movement has apparently caused great surprise, and, now that it has an actual existence, a great conflict of opinions as to its wisdom. The proposal is to give the *title* of "Doctor," and not to confer *degrees* such as M.B., M.D., M.S., or B.S. The scheme will probably have the sympathy of most London teachers, and the best wishes for its success among the London students. On the other hand, it will be sturdily opposed by the graduates and authorities of every university in the kingdom, who will look upon it as an infringement of their rights and privileges. "Degrees should only be given by universities" will be their contention, and the conferring of a title will be confused by them with the granting of a degree. A greater objection, in our opinion, is that, although the medical examinations of the two Colleges fully warrant such a title, those in Arts and Science cannot be deemed satisfactory. A second division in the second class of the Pupils' Examination at the College of Preceptors, even if a Latin author who is never changed and a modern language be taken up, is too low a standard, and some other preliminary examinations now deemed sufficient for registration are but little better. A title of "Doctor" should imply more than this minimum of education in Arts. Physics and Chemistry are included in the Conjoint Examination Scheme, but Biology is unrepresented, and surely some slight acquaintance with this science should be a necessary preliminary to a title of "Doctor." These defects in medical education seem to us greater objections to the present movement than the opposition which may be anticipated from the Universities, in many of which medical examinations are less searching and complete than at the two Colleges.

Another body which must also be referred to in this question is the embryo Teaching University for London, whose future it is as yet very difficult to forecast. Will it merge into the University of London? If so, it will probably be of small use to students of medicine, however much it may affect those in Arts and Science. But if it attains to an independent existence, and holds out its hands to the great legal and medical corporations, as well as to the educational bodies, it may be of the utmost service to medical education by supervising the preliminary knowledge and examining in Arts and Sciences, leaving the strictly technical examinations to the existing authorities. We infer that some such idea exists among its promoters, as at its meeting on Monday last, in considering how boards of studies and a governing body should be best constituted, so far as the Faculty of Medicine is concerned, it was expressly stated that in addition to the teaching element, representatives of the Royal Colleges of Physicians and Surgeons would be invited to take seats amongst the governing body.

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The General Medical Council has displayed a new quality. Its most redoubtable champions, up to Saturday last, would not have maintained that, with all its virtues, it was capable of promptitude. But in one brief moment the supposition of this "fair defect of nature" has been refuted. One act of decision gives hope of more, and we can only trust that a new future of firmness and business-like faculty is in store for this much-abused body. The peculiar nature of the subject in regard to which the Council showed this unexpected quality may be thought by some to derogate from the significance and the merit of its action. There is certainly something in the proximity of money which taints even the best natures, and throws a certain air of vulgarity over the highest conduct. So it is rather unfortunate that the noble action of Saturday had reference to a financial question. The Council is in trouble about money matters; not in the vulgar way of impecuniosity,

> "That horrid *want* of pence
> That vexes public men."

The difficulties of the Council are all the other way—the *embarras de richesses*. But, even so, they are becoming serious. Last year the Council received, chiefly from the shallow pockets of the entrants of the profession, no less than £8424 2*s*. 3*d*.—the largest sum, we presume, it has ever received in one year. Certainly there is nothing like it in the last seven years; and it is in excess by £478 14*s*. 9*d*. of the sum received in the year 1883. There is one virtue that nobody will deny the Council—that of knowing how to spend money; and with rising income it feels the corresponding duty of expenditure and cultivates its powers. Still it did not succeed in the last twelve months in making ends meet. It succeeded in spending the handsome sum of £7084 6*s*. 7*d*.—more by £2633 than the expenditure of 1883, and this upon perfectly impalpable objects, —but yet had to leave £1339 15*s*. 8*d*. unexpended, to be added to the ever-increasing investments of the Council, which now amount to £38,669 17*s*. The average income of the last three years has been £7884 12*s*. 6*d*., and the average expenditure £5452 1*s*.—showing an annual excess of income of £2432 11*s*. 6*d*. This is the pleasant dilemma of the Council—an income altogether disproportionate to the work done, and the prospect of an ever-increasing disproportion. The best members of the Council feel a good deal of discomfort on the subject, and a corresponding desire to do something to abate the scandal. Accordingly, two or three schemes have been suggested for this end. One, by Sir Henry Pitman, proposed the appointment of a committee to consider in what way to use the accumulated funds of the Council, so as to promote "scientific research for the public good." Dr. Lyons moved an amendment to this, and required that the application of the funds, while for the public good, should be "in conformity with the duties imposed on the Council under the Medical Act." Both these motions were negatived without much discussion on Friday, the 15th inst. But it was on Saturday, the 16th, that the unprecedented display of promptitude and decision occurred on a proposal by Mr. Simon, seconded by Mr. Marshall. The motion was altogether reasonable and to the effect that the Finance and Executive Committees should consider and jointly report to the next meeting of Council whether the registration fee of £5 is more than enough to provide for the full efficiency of the Council, and whether the Council might properly proceed to a reduction of the fee. The very thought of delay in dealing with such a motion was intolerable. It was demanded that the Council itself should decide the great question immediately and on the spot. And, accordingly, all forms of notice being dispensed with, the Council went straight to the affirmation of the following proposal by Dr. Haughton:—"That the registration fee remain *in statu quo*;" and then, with an easy mind, broke up for the Sunday's rest. The profession, however, will not contemplate the growing proportions of this disused and ever-increasing fund with the same satisfaction unless work is done by the Medical Council very different from what it has done this session, or even in the two sessions of last year, when it succeeded in spending £7084, and nearly £3000 of this over its own members. We cannot point to one act of the Council in the present session or in the last year that is of the least consequence in regard to medical education, or to one discussion that would redeem the reputation of the Council as a public body charged with vindicating the sanctity of medical registration and the rights of registered practitioners.

As a specimen of the work over which the £7000 is spent, we will give one instance, not to revert again at present to the perennial theme of Preliminary Education. The Council has been understood of late to be full of great ideas of extending the time of medical education, and throwing back the age at which a licence to practise could be secured. The existing Regulation as regards age is as follows:— "The age of twenty-one *shall* be the earliest age at which a candidate shall obtain a licence to practice, and the age shall in all instances be *duly* certified." Two great operations have been performed on this recommendation. The word *should* has been substituted for *shall*, and the word "duly" has been omitted altogether. Even with such discussions the Council cannot use up its large income, and yet strenuously opposes any diminution of it. Will Parliament and the profession always be so powerless to control a Council at once so useless and so costly?

The Council, on Wednesday last, passed a motion by Dr. Banks, seconded by Dr. Haughton, extending the course of study over five years, if the subjects of elementary physics, chemistry, and biology are included in that period; or at least four years, if a satisfactory examination in these subjects has been passed previous to registration. This recommendation looks serious, but Dr. Matthews Duncan declares it to be practically a mere reaffirmation of the existing recommendation of the Council, which contemplates the disposal of the subjects of physics and chemistry before the commencement of the four years of strictly medical study. And so the money of the profession and the time of the Council are spent.

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THE Report of the Royal Commission on the Housing of the Working Classes has been received with a very general feeling of disappointment. The constitution of the Commission, and the time and labour devoted to the collection of evidence, had created hopes which have not been realised. It had indeed been expected that some definite and substantial remedy would be advanced for conditions which have long been thoroughly recognised and universally condemned. That the Report is almost barren in this respect is, perhaps, due less to an inability on the part of the Commissioners to grasp the subject with which they have had to deal than to difficulties which surround the question on every side.

If further evidence were required, it has been abundantly forthcoming, that overcrowding and its attendant evils exist to a very large extent in the metropolis and in other large towns, and that this, moreover, is the result of circumstances which the State has not been well able to control. Working people, with small and variable earnings, have been obliged to live near their employment, and hence opportunity has been given for high rents to be demanded for the worst accommodation; middlemen and others interested in house property have bought up the ends of leases when houses have been falling into decay, and have failed to keep them in proper condition. Freeholders have, in their turn, neglected to exercise the powers they possessed for maintaining their property in habitable condition, and sanitary authorities have not exerted themselves to enforce the provisions of the Sanitary Acts which affect this question. Thus, by neglect of duty with regard to the state of repair of dwelling-houses and by a system of overcharge, the working classes have suffered heavily both in their pockets and in their comfort.

But even if freeholders and sanitary authorities had done their duty and the owners of tenement houses had been satisfied with moderate profits, there would still be a great lack of accommodation, for at the present time the scarcity of space upon which suitable dwellings can be erected presents a physical difficulty which is not easily met. Increased facilities for railway travelling at reduced fares may assist a few to live at a distance from their work, but the loss of time spent in daily journeys is in itself a severe tax to those for whom time has a money value.

Thus, the Report has had to concern itself with a multitude of considerations, each, perhaps, important in its way and having more or less bearing upon the subject; but it leaves a strong impression that the remedies suggested are not very potent, while some of them raise questions of considerable moment. For instance, the proposal to devote for the purposes of artisans' dwellings the forty-five acres in the metropolis now occupied by prisons is an expedient that would give temporary and partial relief to the congestion of the districts in which the prisons are situated, while the further suggestion that in fixing the price "due regard should be had for the purposes to which it is intended to devote the land" has, indeed, raised a question which appears in its true light only when consideration is given to Lord SALISBURY's proposal that the sites should be sold at cost price to some trust that will build workmen's dwellings upon them. The greater the desire to find an effectual remedy the greater the risk of accepting a principle which, on the face of it, seems to commit the State to socialism; for in this sense only can be construed the suggestion to provide accommodation for less than its money value. It is, however, a well-recognised fact that the condition of the working classes reacts on the whole community, and no objection need be taken therefore to the recommendation that the State should lend money for the erection of artisans' dwellings at the lowest possible rate, without loss to the national exchequer.

The enunciation of the principle upon which we have dwelt is, so far as we can see, the one thing novel in the Report; for the rest, old-fashioned remedies are once more exhibited. The amendments which are recommended in existing Acts appear to be well considered, and probably some good would result if they were carried into effect; thus, the proposal that the cost of proceedings under TORRENS' Act should in small districts be shared by adjoining districts will perhaps give some impetus to improvements under this statute. Again, the proposal to revive Lord SHAFTESBURY's Act, which under the vestries has been a dead letter, by transferring it to the Metropolitan Board of Works, awakes a hope that it may yet have some influence for good. Much stress has been laid upon the default of local authorities to make and enforce regulations under the 35th section of the Sanitary Act for houses let in lodgings. While fully endorsing the opinion that these regulations would be beneficial, especially for the reason that they would tend to shorten proceedings which are otherwise necessarily tedious, it is obvious that there has been too much disposition to judge of the work of local authorities by this criterion and to overlook the action they have taken under other sections. The recommendation with regard to the position of medical officer of health is important, as giving recognition to the value of the service rendered by this official; but it should not be forgotten that he cannot be debarred from practice until his remuneration is placed upon a better footing, and until his tenure of office is more secure.

But while Acts are amended and recommendations are made that their provisions shall be enforced, the motive power is still wanting for this purpose. Until a wider public interest is created in the metropolis and elsewhere in local affairs, alterations of the statute-book are of little avail. That the efforts of the Commission may assist in this direction is certainly probable. The fact stated by Lord SHAFTESBURY, that very great improvement had taken place in the last thirty years in the dwellings of the working classes, is itself full of promise; and we may therefore hope that this improvement will continue, although no immediate remedy has been indicated by which the change is to be brought about.

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THE report, which appears in another column, of a general meeting of the Association of Fellows of the Royal College of Surgeons of England, held on Wednesday last, contains the welcome information that a possible basis has been discovered for the combined action of the Associations of Fellows and Members in their endeavours to amend the constitution of the Council, and to reform the general and academic administration of the College. Many circumstances have co-operated to give to the Royal College of Surgeons of England a large and almost predominating influence over medical education in this country; but, we repeat, the College as a political body has hitherto consisted only of the four-and-twenty gentlemen who have succeeded in getting themselves elected members of the Council. Though by implication the College is made up of Fellows and Members and a small governing body named the Council, the latter, in accordance with the pernicious traditions upon which the College was originally founded, has arrogated to itself all the power, influence, authority, and prestige which should strictly belong to the whole of the body politic and corporate. For the first forty-three years of its existence the Council was not only self-elected (so-called), but every member of it was elected for life. Forty-two years ago the order of Fellows was constituted, from and by whom members of Council have since been elected for a period of eight years, though eligible for re-election. Experience has, however, proved that this alteration, for well-known reasons, has had but little effect in restraining the vagaries of the Council or in increasing the influence of the Fellows in legislative acts of the College. After election every member of the Council at once passes out of the reach of remonstrance by the Fellows. How completely the Council regards itself beyond and above the censure of the Fellows is shown by its repeated rejection of many of the recommendations proposed by the Association of Fellows to be introduced into the new Charter. But, grievous as may be the lot of the Fellows, that of the Members is worse. From the first day of its existence until now the Council has done all within its power to render the status of *Member* of the College contemptible. Every charter, bye-law, standing rule, and ordinance has been conceived and executed in a spirit of antagonism to the Members. Members have been denied the right to sit in, or vote for members of, the Council, and one of the first bye-laws made by the Council was to the effect that no Member of the College should be eligible for the office of secretary. The spirit of this bye-law is still zealously fostered. How significant is the contrast with the College of Physicians in this respect! When these and the other disabilities imposed on the Members of the College are borne in mind, it is not surprising that the Association of Members has been provoked to demand a due and authoritative recognition of the corporate and academic rights and status of Members. The first proposals of the Association of Members were startling in their extent and pretensions. To confer electoral privileges upon any and every medical student as soon as he should succeed in obtaining the diploma of Member would, we believe, be neither conducive to the welfare of the College nor useful to medical education and legislation. The compromise suggested by the Association of Fellows ensures a reasonable and equitable representation of the special interests of the Members, at the same time that it commits the care of these interests to the consideration and keeping of those Members whose stability and stake in professional life imply adequate obligation and responsibility.

Annotations.

"Ne quid nimis."

MR. ERICHSEN, F.R.S.

All who take an interest in the Royal College of Surgeons of England will learn with regret that Mr. Erichsen has resolved not to seek re-election into the Council next July. Few persons beyond those who have followed the business of the Council closely are aware of the great services which Mr. Erichsen has rendered to the Fellows and Members, and of the impetus which his efforts have given to the cause of reform. Immediately after his election in 1869 he redeemed his pledge to seek for the Fellows and Members the right of holding meetings in the College. To these endeavours they are indebted for the facilities for holding the two general meetings in the year 1870, and the memorable meeting of March last year, when the alterations proposed by the Council to be made in the Charters were presented. But not only were the Fellows and Members indebted to Mr. Erichsen for the facilities for holding the last meeting, but it was through his personal action and interference that the occasion was discovered and secured; otherwise the alterations would have been smuggled through the Council without their knowledge. At all times Mr. Erichsen has been a loyal and strenuous supporter of the rights of the Fellows and Members, and in return he may rest assured that he has won the confidence, respect, and esteem of all, to a degree and in a sense unusual to members of the Council, if not entirely unprecedented.

WORRYING THE "MAD DOCTORS."

It is characteristic of the human mind that when it once becomes disturbed on any subject it takes the worst possible view of the question at issue, and is liable at any moment to be worked, or likely to work itself, up to a very furor of indignation on the mere suspicion of personal wrongs in connexion with the suspicion awakened. This peculiarity is wont to assert itself, in and out of season, with striking, and occasionally inconvenient, force upon the slightest provocation. If a dynamite raid is made on public offices, private, and even obscure, citizens are panic-stricken with the fear of being singled out for the attack of the traitorous. If somebody suffers from lead-poisoning, the whole community is agitated with apprehension of a similar calamity. The diphtheria in milk of a small dairy supply in a limited area incites the multitude to eschew that generally wholesome and nutritive commodity altogether. There is therefore nothing unnatural, or indeed very remarkable, in the fact that those who feel themselves aggrieved by being, at any period of their lives, confined in lunatic asylums should take advantage of the opportunity afforded by a paroxysm of public lunacy law reform to worry the "mad doctors." Those who keep licensed houses for the insane, and those who sign certificates of lunacy, are having what our neighbours across the Atlantic euphemistically describe as "a bad time." We are sympathetically sorry for our brethren in trouble, and for those in bondage through fear of harassings and avengings similar to those which have fallen on the heads of the guileless, but, as it seems, not guiltless, victims of recent raids at law. How, and when will it end, this persecution of the innocent but wrong-doing medical practitioner in lunacy? Everybody who knew anything about the matter must have been aware that there was plenty of loose and perfunctory examining and certifying; and those who had adequate notions of the way in which the Commissioners in Lunacy had contrived to reduce their supervision to a ridiculous farce must have been prepared to discover that the existence of a standing Commission in Lunacy, so far as the safety of the sane was concerned, afforded no real protection. We are unwilling to aggravate the troubles of these troublous times in lunacy, or we could not hesitate to insist strongly on the need of entire reconstruction at Whitehall. Indeed, we sincerely trust that, as Lord Shaftesbury feels compelled to resign, advantage will be taken of the opportunity to place the Commission on a new and totally different footing, with some sort of guarantee that its duties will be discharged in the future better than they have been in the past. Something more than "ticking off" the inmates of asylums on a list, and looking to see whether pots are clean and sheets carefully folded, with a little office business consisting mainly of the mere clerk's work of seeing whether the blank places in certificates are properly filled in, is necessary for the welfare of the insane and the security of Her Majesty's rational subjects; and more may certainly be expected of a Commission which costs the country upwards of £15,000 a year. Except for the *publicity* involved in the presentation of reports to Parliament, we do not believe the Commission would be worth 15,000 pence. If the Commissioners in Lunacy had done their work earnestly in the spirit as well as the letter of the law, this worrying of the "mad doctors" would have been impossible, because there would have been nothing of which to make an occasion for persecution—nothing, in fact, of which to complain.

CONFERENCES ON CHOLERA.

The recent conference upon cholera held at Berlin did not make any notable advance upon the position taken up by the same body of scientists at their gathering last summer. To be sure, much has happened since then and a great deal more information has been obtained concerning the comma bacillus and its allies. Thus Professor Koch had in the first place to meet the numerous objections that have been raised during the past six months to his view that the comma bacillus is to be regarded as the actual cholera germ. The members of the conference now, as then, appear to have tacitly or openly coincided with Professor Koch's doctrine and all that flows from it. Indeed, had it not been for the presence of Professor von Pettenkofer there would have been little to debate about. Roughly speaking, the supporters of the bacillary doctrine represent the contagionist side, the opponents the non-contagionists, which has such ardent advocates as Dr. Cuningham and Sir Guyer Hunter. No doubt the battle will be fought over again at Rome, for Professor Koch represents Germany at the conference now assembled there. Professor von Pettenkofer's difficulties in admitting the comma bacillus to be the cause of cholera rested on many grounds, but in the main upon the epidemiological data, especially those having reference to the influence of locality and season. Yet he seems to have admitted the dissemination of cholera by human intercourse, although he could not admit that the introduction of a case of cholera on board ship could be the starting point of an epidemic. Altogether the doctrines enunciated by Professors Koch and Virchow seem to have had more cogency and to have been more definite than those advanced by Professor Pettenkofer. A great deal has been made of the question of drinking water, the purity of which does not seem to Professor Pettenkofer to be of such importance as the conditions of soil; and the often-cited instance of Fort William was claimed as proof of the truth of both assertions. But, as Professor Virchow pointed out, an improved water-supply necessitates improved means for the disposal of waste; and although the analogy he drew between typhoid fever and cholera may not be fully grounded, there is much to be said for it. The practical outcome of the conference was the recommendation of measures for the prevention of the spread of epidemics, the most important of which is the separation and isolation of the sick. At the same time the futility of the adoption of quarantine on land, such as, for example, was witnessed on the Italian frontier last year, was fully recognised. How far the conference at Rome will adopt the same course as that at Berlin is doubtful; in the present state of marked divergence of opinion and in view of the resolute tenacity with which unproved dogmas are held one cannot expect anything like unanimity from a heterogeneous gathering. Nor until agreement is arrived at as to the nature of the disease can we hope to formulate clearly the measures wherewith it must be combated with any hope of complete success.

THE ROYAL VISIT TO NETLEY.

Among the many noble qualities which characterise Her Majesty the Queen there is probably none which more endears her to the public than her sympathy with the afflicted and suffering. This has been often displayed in the case of her wounded soldiers on their return to their native land, and has not been wanting on the occasion of the present war in the Soudan. On Saturday last Her Majesty, attended by Princess Beatrice and Prince Henry of Battenberg, visited the sick and wounded in our great invaliding hospital at Netley. Her Majesty was met at the railway station by the General commanding the district and the Assistant Adjutant-General, and was attended by them to the hospital. There Her Majesty was received by Surgeon-General Murray, the principal medical officer, and by Professors Longmore, Smith, and De Chaumont, the chaplain, the Rev. J. C. Edghill, and Mrs. Deeble, the lady superintendent of nurses, who wore the Royal Red Cross and a medal conferred on her for her services in Egypt. Her Majesty visited the medical division, where the convalescents were drawn up in the corridor, the surgical division, where the wounded are under treatment, entering into conversation with many of them, and the sick officers' quarters. There were in the hospital at the time 71 wounded and 146 sick from the Soudan and Egypt, and shortly after Her Majesty left 83 more sick and wounded arrived from the Soudan. The effect of these visits of the Queen to the sick and wounded cannot but be gratifying to the army and cheering to the poor fellows, as showing the warm interest taken in them by Her Majesty and the members of the Royal Family. The visit on the present occasion was all the more to be appreciated as it involved a considerable amount of exertion and personal fatigue on the part of the Queen, who travelled from Windsor for the express purpose, returning to the Castle the same day.

CUTANEOUS AND DEEP REFLEXES.

The tenth original article of the *American Journal of the Medical Sciences* gives the results of some observations on the cutaneous and deep reflexes. Dr. Philip C. Knapp of Boston, U.S.A., has examined the condition of the reflexes in 239 individuals admitted to the Boston City Hospital during the latter half of the year 1883. The points noted were the presence or absence of the different reflexes in each patient, together with a comparison of the reflexes on the two sides of the body, and a rough estimate of the degree of contraction after irritation. The following are the conclusions at which the author has arrived:—1. Absence of the plantar or cremasteric reflex is usually pathological, depending upon a direct lesion of the reflex arc or some cerebral disturbance. 2. Absence of the other cutaneous reflexes is not necessarily pathological. 3. Absence of the patellar reflex may be due to cerebral disturbance, especially in alcoholic subjects. 4. Ankle and patellar clonus are pathological. 5. The deep reflexes of the upper extremity are of frequent occurrence, and have no special pathological significance. 6. The costal reflex is found in the majority of cases without general exaggeration of the reflexes, and with no signs of phthisis. 7. When the reflexes differ on the two sides of the body, though it usually signifies some unilateral disease of the nervous system, it is not always pathological. On the whole, the above propositions accord with the observations of Buzzard, Gowers, and others who have worked most at this important question. That the patellar reflex may be absent from cerebral disturbance is most probably correct; nevertheless it would be difficult in many cases to exclude the possibility of a direct damage to the reflex arc itself. The frequency with which the deep reflexes of the upper limb are present in cases of disease of the brain and spinal cord has probably been overlooked as the result of imperfect examination; and we are disposed to agree with the conclusions of Dr. Knapp.

BULLYING AT SCHOOL.

The parents of most public school boys have had to undergo the painful experience of obliging a poor little boy to return to school in a state of dejection, if not in abject misery. The child has gone willingly enough to his preparatory school, where his companions are very much of his own age, and where he can hold his own. There, also, he has been tended with some approach to parental care. But his first few terms at a public school, whether as day boy or boarder, are a new experience to him of trial and often of wretchedness. All this becomes more or less known to his parents in the holidays. When term time approaches the boy gets miserable. The family doctor is often called in to arbitrate between father and mother, and settle whether the poor little fellow is well enough to go back to school or not. It is not often that the same ordeal has to be undergone in the case of girls, for school to them has attractions and often fascinations which in most instances are absent from boys' schools. It is not that school mistresses are less severe in discipline than masters, nor that the work at a girls' is less arduous than at a boys' school. The difference is that little girls are much petted by the bigger girls, whereas little boys are commonly browbeaten and oppressed by bigger boys. Any boy brought up in a refined home, under the guardianship of sensitive and high-minded parents, will in all probability experience some of the heaviest trials of his life during his first year or so at a public school. He will be buffeted about by his bigger schoolfellows, and often subjected to coarse and obscene language, and there will be little or no redress for him. We do not imply that every elder boy at school is obscene and brutal; but in most schools there is a number of really bad boys, and these sometimes from the highest social rank. As one black sheep taints the flock, so one evilly disposed boy contaminates "the set" he is in, and bullies all weaker than himself. It is often opposed to the immediate interest of the school to get rid of such a boy, for his parents may be influential. There are few places where one law for the rich and distinguished and another for the poor and obscure are so tacitly acquiesced in alike by masters and governors as at our public schools. We have often been struck by the dread parents have of making their dissatisfaction known either to the authorities or through the public press, for fear of the unpopularity into which it may bring their boys. The terrorism big boys exercise over little ones is scarcely greater than that which schoolmasters exercise over parents, by reason of a fear of the consequences to the boys concerned. Sir William Harcourt is rendering a great service to English school boys by giving the prominence he does to the fatal case of bullying at King's College, and thereby causing an act of justice to be done to parents of every grade. We do not imply that King's College is worse than other schools; but there, and elsewhere, has existed a lack of discipline in the intervals of class. The decision arrived at by the governors of King's College, that for the future safety of the boys the masters are to keep watch in rotation in the intervals of class, implies that their system has been defective in this particular. Indeed, it virtually admits the existence of the bullying complained of in their school, or of something equally objectionable. On the particular case in question which Sir William Harcourt has directed shall be inquired into by the Public Prosecutor, it would not be fitting to express an opinion. If this sad death convinces school authorities that boys cannot be let loose from class, in the absence of adequate supervision, without risk of injury to each other, and danger to the reputation of their school, and, if an injury should prove fatal, that they cannot hope to escape henceforth, any more than King's College has, one of the gravest charges that can be brought against a public body or an individual—the inquiry instituted by the Home Secretary will not be in vain. Whenever death takes place at a public school, either from injury or from disease, the law should provide a public inquiry. In the past there has been too much hushing up of such things; hence the prominence we have given in our columns to all matters concerning the welfare of the English school boy. Now that the Secretary of State has taken up his cause, he may hope for a happier future.

THE PRELIMINARY SCIENTIFIC M.B. EXAMINATION.

The revised regulations for the Preliminary Scientific Examination, which will be found elsewhere, will, we fear, cause some disappointment. The concession that has been made by the Senate to the thrice-repeated demand of Convocation for a half-yearly examination is deprived of some of its grace by the withholding from the candidate who appears in January the chance of obtaining *distinction*. The Senate, in following what can only be supposed to be the recommendation of the examiners in this matter, has created a precedent for which there is little, if any, justification. To be logical, it ought forthwith to remove the Honours list from the January matriculation, for in what other respects does this Preliminary Scientific Examination differ in regard to medical degrees? Doubtless the intention is to encourage at least one year's study to intending candidates in Honours, and to make that year conterminous with the academical sessions. But as a matter of fact, there will be few youths so well prepared in the subjects of the Pass Examination as to present themselves for the Preliminary Scientific Examination within *at least twelve months* of passing matriculation, unless they avail themselves of the option given them to take up one or two subjects at a time. We are glad to see that Convocation has referred to its Annual Committee the question whether candidates who fail in one subject should be allowed to come up for examination in that subject only on a subsequent occasion. This would be most applicable to such an examination as the Preliminary Scientific, in which each of the three subjects of the Pass Examination is made to cover so wide an area. It must be confessed that the requirements of the examination have been placed very high. The subject of general biology, for example, includes a range of study that by itself would require prolonged and patient work, comprising a knowledge of animal and vegetable anatomy and histology, which there is at present little opportunity of obtaining. In the face of the extended requirements of the University of London, it is time that a serious effort be made to form science faculties and schools, which should have the sole responsibility of training youths in these preliminary subjects, and that no *medical* instruction be allowed to commence until this scientific study be accomplished. For all that, we are far from thinking that it would not have been both politic and fair if the University of London had taken the opportunity to demand a little less science from those who wish to graduate in its medical faculty.

DISINFECTION AND DISINFECTANTS.

A COMMITTEE of the American Public Health Association have issued a preliminary report on the subject of Disinfection and Disinfectants, and the views expressed on the subject are eminently sound. It is explained at the onset that disinfection necessitates the actual destruction of any specific infectious material which gives rise to infectious diseases, and that the destruction must not be partial, but complete, if true disinfection is to be obtained. Popularly, the term disinfection is used in a much broader sense, and mere deodorisers and antiseptics are styled disinfectants, the result being much misapprehension and failure; for many such agents are entirely without value for the destruction of disease germs. This applies, for example, to the valuable antiseptic sulphate of iron or copperas. Antiseptics, however, exercise a restraining influence upon the development of disease germs, and hence they have a proper place amongst the agents to be used for certain purposes when epidemic diseases are prevalent. Many so-called disinfectants now in the market are mere deodorisers, and are quite valueless for their professed purpose. Chloride of lime is held by the Association to be entitled to the first place for disinfecting excreta; it is both trustworthy and rapid in its action. A solution of corrosive sublimate and permanganate of potash in soft water, in the proportion of two drachms of each salt to the gallon, is placed next, as being really effective, but slower in its action. Liquor sodæ chlorinatæ is also referred to, but it is dearer than chloride of lime, and has no special advantages over it. For clothing and bedding which cannot be washed, a temperature of 230° F. is recommended as sufficient for the destruction of all known disease germs which do not form spores. Super-heated steam under pressure is, however, a safer method to rely on, and, as stated in the memorandum, a less temperature of this agent probably suffices to effect the object than is the case with a dry heat. The report contains useful hints as to the quantities of the agents to be used, and as to the methods of their employment.

THE PREVENTION OF BLINDNESS.

A DEPUTATION from the Ophthalmological Society of the United Kingdom, consisting of Sir Wm. Bowman, Mr. Jonathan Hutchinson, Mr. John Tweedy, Drs. M'Keown, Brailey, and Abercrombie, was received last week by Mr. Russell, M.P., Parliamentary Secretary to the Local Government Board, and by the Registrar-General; Dr. Buchanan was also present. It will be remembered that an interchange of views has for some time past been going on between the Ophthalmological Society and the Local Government Board as to the best means of making the public aware of the danger attendant upon inflammation of the eyes in infancy. Some months ago, as an answer to some propositions made by the Ophthalmological Society to the Local Government Board, the Registrar-General argued that the increased expenditure necessary for carrying out the proposals of the Society would prove an effectual barrier. At the deputation it was urged that the public should be instructed through the medium of the Poor-law organisation and the registrars of births, and it was pointed out how this could be done by the employment of printed forms, which should be given, along with the papers for vaccination, to the individuals registering births. Though we should have been better pleased with a more forcible mode of bringing home the facts to the minds of parents, yet it must be admitted that the plan above suggested will
probably be attended with much future benefi
munity if it be adopted, as seems not unlikely
Government Board. The benefit to be deriv
measures in preventive medicine may be ex
crease as years go by, for with the circulati
forms drawing attention to the perils o
neonatorum there must go on an ever-widenii
tion of knowledge.

THE THAMES SEWAGE COMMIS

IT will be remembered that the Metropo
Discharge Commission, appointed to inquire
condition of the tidal portion of the Thames,
report into two parts, separated from one anot
siderable interval of time. In the first part th
an overwhelming mass of evidence the existen
dangerous, and increasing nuisance, by which
fouled throughout almost the whole of the tidal p
second part, published after a second inquiry,
possible remedies. The Commissioners receiv
ance in the second part of their labours thar
because the Corporation of London backed
work they had commenced so vigorously.
to be generally admitted that the whole of
sewage must be carried down at any rate t
and that even then it must be purified before pa
river. Sir Joseph Bazalgette's scheme for takii
to Canvey Island, near Southend, seems to p
as, or better than, any other. The minute
taken in the second stage of the inquiry are n
and contain much valuable scientific matter a
maps and plans. Many well-known inventors
of sewage schemes were examined, among
mentioned Mr. Melliss, Mr. Sillar, and Mr. B
and their evidence will assist many in the
task of deciding among the competing schem
selves, we incline to the opinion that the m
system is precipitation followed by irrigatic
present frantic efforts of the Metropolitan Bo
to remedy the mischief they have caused, the
described as absurd.

MEDICAL EDUCATION IN BOM

WHEN the Grant Medical College was open
in 1845 the number of students was ten. Af
tuations it was as low as fifteen in 1864-65,
rose again to forty-four or forty-five in
average for the first twenty-eight years,
period the students had not to pay anythi
education, was about twenty-five. Since that t
the number of students has steadily and rapi
until it has reached three hundred, includin
class. The work of the hospital has also i
addition has since been made to that building,
College. Further, there has not been any appre
in the staff of teachers or in the hospital sta
under each professor or teacher therefore a
necessarily be, so large and unwieldy that it m
sible for the students to receive the benefit of
as well as when the classes were small. This
cannot be got rid of by merely enlarging the p
premises. The teaching staff requires to be
with the accommodation, and it has been sugg
best and the most effectual way to give the
relief is not to have duplicate classes and te
and the same college or building, but to have a
or medical school built in connexion with an
The proposal seems a good one, and it is to
the Government will give it a careful and d
sideration. The Grant Medical College with it

hospitals and the European General Hospital could still be conducted on the old system. But with this yearly increasing number of students, one medical college with one hospital for clinical and other teaching is not enough, and more than one such institution may well be considered absolutely necessary.

PROFESSOR OGSTON'S VISIT TO THE SOUDAN.

LAST week Dr. Ogston, the Professor of Surgery in the University of Aberdeen, who has just returned from the Soudan, where he went with a view "to increase his efficiency in teaching and to increase his own personal information," delivered a lecture to the students on some points of interest in connexion with his short stay at Sawakin. After a brief notice of the very inadequate provision made for the wounded on the field of battle in former wars, he gave an account of the organisation and working of the bearer companies under the present system, of the mode of transport to the field hospital, and of the arrangements there made for the prompt and efficient treatment of the cases as they were brought in. We have but one objection to this description as applied to the war in the Soudan—that it describes the medical officers and men of the Medical Staff Corps as non-combatants, who "under the shelter of the Geneva Cross were recognised not only as non-combatants, but as having every claim to neutrality and protection." However true this may be in the case of war between civilised nations, it certainly is not applicable to such wars as that in the Soudan or in Zululand, and we regret that Professor Ogston did not point out this, as it greatly enhances the value of the services rendered by the medical department of the army in this campaign that they have been performed under such conditions of difficulty and personal danger. The Professor enlivened his lecture by two ghastly tales of the war, not from his personal observation, but which he had "on the best authority." He concluded by stating that "he felt quite confident that the amount of interesting matter that passed under his eyes in the short time he had been away would result in a great personal benefit to him; and it would be his best endeavour that, so far as was possible, the usefulness of what he had acquired should be extended to his students at the proper time." We cannot but regret that Professor Ogston did not communicate the result of his observations on the working of the medical service, on the condition of the hospitals, the treatment of the wounded, and the general impression he received as a professional onlooker, rather than deliver a lecture which might have been as easily got up without the trouble of going to the Soudan, and which seems to have been more of a type suited to the general public than for the information of his professional brethren or of the aspirants for admission into the medical profession.

THE URINE IN OSSEOUS LESIONS.

THE condition of the urine in osseous lesions has been studied by M. Verchère, who has formulated the following propositions (*La France Médicale*, May 7th). The facts have been arranged into two divisions according as the lesion is traumatic or inflammatory. The traumatic class is further subdivided into three groups. In the first group the osseous fractures were produced by insignificant causes, and examination of the urine showed that the discharge of phosphoric acid was much above the normal; consolidation of the fracture was not hindered by this excess of phosphates. The second group is composed of cases of fracture in which union was retarded; in these there was polyuria. In the third group there was delayed union with phosphaturia, which preceded the fracture and appeared to cause it. In inflammatory osseous lesions phosphaturia is the sign of a peculiar state of the system.

THE AFTER-CARE ASSOCIATION FOR THE CONVALESCENT INSANE POOR.

THE Rev. Henry Hawkins, chaplain to the Asylum at Colney Hatch, has done us the honour, in his "Plea for Convalescent Homes in connexion with Asylums for the Insane Poor," to quote the few words we wrote in support of an important project to which we are glad to observe that public attention is at last being called, and that, too, in a practical form. On Tuesday a bazaar was opened at the Town Hall, Kensington, by the After-care Association for the Insane Poor, and by its means a fair beginning of support was entered upon. The bazaar was to have been declared open by the much-esteemed Lord Shaftesbury, but unfortunately at the last moment the state of his lordship's health prevented him from being present. In his absence the Vicar of Kensington, the Hon. and Rev. E. Carr Glyn, officiated as chairman, and in a short but effective speech inaugurated the proceedings. Mr. Hawkins described with much care the intentions and objects of the Association, and Drs. Richardson, Hack Tuke, Savage, Norman Kerr, and others supported his earnest plea. If the Association succeeds in its efforts, we shall hope before long to see a series of new institutions springing up to perform two distinct philanthropic purposes—to afford a temporary resting-place for the poor on leaving the asylum, and a home to which they can from time to time return for friendly sympathy and wise direction.

THE LONDON TEMPERANCE HOSPITAL.

ON Saturday last a grand national bazaar in aid of the funds of the London Temperance Hospital was opened in the Floral Hall by her Grace the Duchess of Westminster. The special object of the bazaar is to raise a sum of about £8000, which is needed to defray the cost of the new wing of the hospital, which is now nearly completed. Up to the present time the hospital has consisted of three wards, with a total of fifty-two beds. The new wing includes five more wards, with accommodation for nearly seventy patients, so that the total number of beds will be raised to 120. One gentleman, who desires to be known only as an anonymous donor, has given no less than £5000 to the building fund, and with such an example of liberality before them it is hoped that the friends and supporters of the institution will clear off the outstanding debt upon the new buildings. The Duke of Westminster on Saturday handed a cheque for £400 to the chairman of the Bazaar Committee, and a further sum of £1100 was taken at the stalls during the afternoon. The stalls are picturesquely arranged to represent a mediæval London street, and are liberally and handsomely furnished. The bazaar will continue open every day until and including Whit Tuesday.

IMITATIONS OF ORGANIC TISSUES.

SENOR GARCIA DIAZ has exhibited to the Athenæum of Madrid some remarkable experiments in which he has been engaged for the last two years on the artificial production of imitations of organic tissues. He has invented an apparatus which he calls the "mechanical morphogene," which consists of a hollow cylinder containing a piston for compressing objects at the base. The substance employed is a mixture of sulphate of lime and oil. With this apparatus he has produced epithelial, fibro-cellular, and alveolar tissue. According to the time occupied in the descent of the piston, the nature of its inferior surface, and the proportion of oil in the mixture, different organic forms are obtained. In a second series of experiments Señor Garcia Diaz made use of hollow bodies which, on being compressed, showed perforations in the walls, and were by various other manipulations caused to assume an alveolar texture. Round cells were also obtained by mechanical means. Polygonal cells required great pressure, as may be supposed from the positions they occupy in the human organism. He has also constructed a more elaborate apparatus, called the "pneumatic morphogene," with which microscopical preparations can be produced. In this apparatus pressure, heat, and inflation of air are combined in order to mould the outlines of the principal tissues. Varnish, from its adhering to glass, is the best substance for these investigations. With this, by means of a good deal of delicate manipulation, the most important organic tissues can be imitated, showing the author that their structure depends merely on physical conditions, no "mysterious living principle" being necessary for their production any more than for that of organic chemical substances, such as urea, which have long been shown to be capable of being built up synthetically by chemists.

DEATH OF PROFESSOR HENLE.

THE death is announced of Professor Jacob Henle of Göttingen. He was one of the last of the famous German school of scientists which flourished at the beginning of the present century, and was a most active worker all his life. When prosector and *privat docent* at Berlin, he published, in 1840, some pathological memoirs on Miasm and Contagion, Nervous Sympathy, the Course of Periodicity of Disease and Fever, subjects afterwards embodied in his more ambitious work—"Handbuch der rationellen Pathologie" (1846-1853), written when *Professor of Pathology* and Physiology at Heildelberg. In this work he foreshadows the notion of fungi playing a part in the etiology of disease. But it is in anatomy that Henle will be remembered best. His contribution to the knowledge of the structure of the kidneys completed the work of Bowman and Müller; and his famous treatise on Human Anatomy, commenced in 1855, has a world-wide reputation. In 1882 the celebration of the jubilee of his doctorate was sighalised by the publication of a volume containing anatomical and embryological memoirs by many of his old pupils, amongst whom may be named Aeby, Bardeleben, Du Bois Reymond, V. Dusch, Flemming, Friedreich, Kölliker, Kühne, Langhaus, Merkel, Waldeyer, and Westphal. In the same year Henle himself contributed to the *Archiv für Microscop. Anatomie* a memoir of the life-work of Theodore Schwann.

THE CONTAGIOUSNESS OF PHTHISIS.

IN a paper recently read before the College of Physicians of Philadelphia, Dr. W. H. Webb strongly supported the doctrine that phthisis is contagious, and brought to his aid many marked examples in literature, and some personally known to him. He described an apparatus which he had devised for filtering air, with a view to discover whether tubercle bacilli could be found in the atmosphere of places of public resort. The trap consisted of a brass cylinder containing perforated steel discs plugged by thin layers of pyroxylin; the cylinder was connected at one end with a pump, and at the other with a funnel, which was placed over the ventilating flue of the place examined. Specimens of the pyroxylin obtained in these experiments were sent to Drs. Shakespeare and Morris Longstreth for examination. Dr. Shakespeare was only able to detect one unmistakable tubercle bacillus in the four specimens sent him; but Dr. Longstreth was more successful, finding the bacilli in four out of six slides prepared from one of the specimens. Considerable difficulty was, however, met with in the research, owing to the nature of the material and the necessarily great admixture with foreign matters. Scanty as this evidence is, it does, in Dr. Webb's view, sufficiently support his thesis, and he urges that the tubercle bacillus is an undoubted fact, and that clinical observation conclusively proves that healthy individuals living in an atmosphere contaminated by the phthisical will contract the disease. He accused the "non-contagionists" of having "wilfully, unhesitatingly, and without warrant, perverted the language, even absolutely falsifying the statements, of authors they quote in support of their cause."

THE FORTHCOMING EXHIBITION OF INTRACRANIAL TUMOURS.

THE Council of the Pathological Society have announced an exhibition of and discussion on intracranial tumours, to take place at the first meeting of the Society in February, 1886. The announcement of this intention at so early a date is doubtless made with the object of giving sufficient time and notice to intending exhibitors to get their material into order. The term "intracranial tumours" is to include cysts and gummata. It is hoped that the following features will receive *consideration*:—The nature of the tumours, their situation, size, probable duration, and age at which they occur; the number of them present in the brain; and the presence and situation of secondary tumours. It is desired that the discussion may be illustrated by as many specimens as possible, as well as by pictures and diagrams. In our opinion the exhibition and discussion in question are peculiarly happy suggestions, and we congratulate the Council of the Society on conceiving so fortunate a scheme.

THE DETENTION OF LUNATICS.

A REPLY has been received from the Local Government Board by the Mile-end Old Town Board of Guardians to a letter suggesting an extension of the provisions as to the detention of alleged lunatics in certain cases, proposed to be inserted in the Lunacy Laws Amendment Bill now before Parliament. The Lord Chancellor has, the Board states, with a view to its insertion in the Bill, given notice of a clause providing that where a constable, relieving officer, or overseer has knowledge that there is within the limits of his jurisdiction a person alleged to be a lunatic, for whose care and maintenance relief appears to be requisite, he may remove the alleged lunatic to the workhouse of the union; and the master of the workhouse shall receive him therein; but no person shall be so detained for more than forty-eight hours, unless in the meantime the provisions of the Act relating to the detention of lunatics in workhouses have been complied with.

ENORMOUS CALCULUS.

WE understand that a calculus far exceeding in size that mentioned in THE LANCET of the 2nd inst. as having been extracted by Sir Henry Thompson has recently been removed from the human bladder by Mr. Rivington at the London Hospital. The calculus weighed (avoirdupois) 1 lb. 9 oz. 2 dr. when removed. It weighs, now that it has been put together and in dry state with hollow centre, owing to absence of nucleus and débris, 1 lb. 6½ oz. (avoirdupois). The dimensions are thirteen inches in circumference lengthwise, and ten inches transversely.

LICKING ADHESIVE STAMPS AND ENVELOPES.

THIS is a perilous practice, against which the public needs to be put on its guard. We have seen bad consequences ensue from the habit, which is a very common one. Those who are frequently thus moistening the gum on adhesive surfaces suffer from local irritation, sore tongues, and the like, while every now and again we hear of special propagation of disease by the habit. A curious illustration of the way in which disease may be communicated was recently brought under our notice. An envelope received from a person who habitually took large quantities of morphia hypodermically was reclosed by the person who opened it by licking the adhesive surface, with the result of making him violently sick. The mere touch of the tongue of the taker of morphia had rendered the gum intensely nauseous. If this could happen, obviously there must be grave peril of the transmission of disease by such means. It is not likely that many persons would even incidentally re close an envelope in this way; but the incident may serve to show how desirable it is not to run the risk of even taking in the impurities of new adhesive matters from stamps and envelopes. It is very easy to avoid the practice The danger only needs to be pointed out.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

AN election for a member of Council, in the room of Dr. Mapother, resigned, took place on Tuesday, the 19th inst., when Dr. Edward Hamilton, Professor of Surgery in the Medical School of the College, was elected without opposition. The annual elections for President, Vice-President, Secretary, and Council will be held on Monday, June 1st, when Dr. Cameron will be advanced to the Presidency, and most probably Mr. William Stokes will be elected Vice-President.

CHOLERA "VACCINATION" IN ALCIRA.

IN a letter in a Spanish medical journal from Alcira, the writer says that he has just proved the existence of Koch's comma bacilli in the stools of a case he has seen. He mentions also that the only two boys in an institution in that place who were not "vaccinated" by Dr. Ferrán at his first visit have been attacked by cholera, and that this fact has produced such a profound sensation in the town that all the inhabitants have the greatest faith in Ferrán's preventive. The same journal states that Dr. Ferrán has been dismissed from his post in charge of the hospice at Tortosa by the municipal authorities, who probably think that his time is so fully occupied in other ways that he cannot devote the attention to the local infirmary that is required, and that could be given by a less eminent medical man.

THE SALVATION ARMY AND LUNACY.

THERE has been a slight skirmish or interchange of shots between an outpost of the Salvation Army and a medical man on the subject of the proceedings of the army and lunacy. Surely "General" Booth does not need to be told that there is such a thing as religious mania, and that the sort of excitement his propaganda produces is likely to act injuriously on hysterical females and excitable males. Emotional perturbation is always mischievous. The weak feel it more than the strong. Every description of "revival" produces a crop of insanity. It is to unstable and excitable nervous centres this sort of enthusiasm appeals, and out of the multitude affected there must be some who break down.

EXTIRPATION OF THE GALL-BLADDER.

AT the Brussels Academy of Medicine Dr. Hyernaux reported a case of hepatic colic caused by gall-stones, in which Dr. Thiriar had extirpated the gall-bladder. Although the patient recovered, the majority of the speakers considered the operation undesirable and unnecessary. They thought that it ought to be borne in mind that this affection sometimes underwent a spontaneous cure, and they advised that it should be treated by a carefully regulated dietary and medicine, and that recourse should not be had to an operation fraught with such serious risk.

MEDICAL LEGISLATION.

THERE is reason to believe that the Government have some intention of introducing a Medical Bill after Whitsuntide.

THE CHOLERA.

WE are glad to be able to give an emphatic denial to the report that cholera has broken out in Durham. Not a single case has occurred in that city.

THE Select Committee appointed to consider the law relating to the control over telephone, telegraph, and other wires, in their report which has just been issued state that they, having heard evidence from the Post Office, the telephone companies, the various local authorities of the metropolis, the corporations of some of the leading provincial towns, and private owners and occupiers, have come to the conclusion that the risk of danger to the public from overhead wires has been very greatly exaggerated. At the same time they are of opinion that the probable development of the telephonic system makes it desirable that there should be some legislation on the subject.

PROFESSOR BURDON SANDERSON, on the 15th inst., delivered a lecture at the Royal Institution on "Cholera, its Causes and Prevention"; in the course of which he gave a short history of the manner in which at various periods the disease had spread, and stated that those who resided in the west and north of London need have no fear as to cholera if it fixed itself again in the east of the metropolis. He, however, predicted that if the disease intended to attack London this year it would long ago have been on the march.

AT a recent meeting of the Ballinrobe Dispensary Committee, it was stated that in the absence of the local medical man the porter of the workhouse attends the dispensary, dispenses medicine, extracts teeth, and vaccinates children. To make things worse, he is an illiterate man, unable even to read a label. After a long discussion, it was resolved that the porter be dismissed, and that the Local Government Board be called upon to hold a sworn inquiry into the circumstances.

A SPECIAL prize has been awarded by the Academy of Medicine of Paris to Dr. Murrell, Lecturer on Pharmacology and Therapeutics at the Westminster Hospital, for his introduction of nitro-glycerine as a remedy for angina pectoris and allied diseases. A sum of 500 francs has been awarded to Dr. Henri Huchard of Paris for his work entitled "Les Angines de Poitrine."

THE district of Pensa, in Russia, has decided to grant a pension to the families of its medical officers who have died from cholera. This is without reference to their length of service. The sum of 900 roubles is to be granted yearly to the families of qualified medical officers, and 180 roubles to those of members of the subordinate medical service.

DR. WYCHERLY, High Sheriff for the city of Cork, is to receive the honour of knighthood, in appreciation of the part he took in the reception of the Prince and Princess of Wales. Dr. Banks also is spoken of as likely to be the recipient of a baronetcy.

DR. FREDERICK TAYLOR having been elected Physician to Guy's Hospital, Dr. W. Hale White has been appointed Assistant-Physician to that institution.

THE Birmingham Hospital Saturday collection had reached the unprecedented amount of £6325 0*s.* 7*d.* up to the close of bank hours last Monday, showing an increase of £393 on last year's total.

DR. PETROV, Professor of Pathological Anatomy in the University of Kasan, Russia, has resigned, and the Faculty has nominated the prosector, Dr. N. Ljubimov, as his successor.

TWO fatal cases of cholera are stated to have occurred at Marseilles.

CHOLERA CONFERENCE AT BERLIN.

(Concluded from p. 913.)

THE fourth sitting, on May 7th, was opened by a demonstration by Professor Koch of some inoculations with Brieger's bacillus, and of pure cultures of comma bacilli obtained from the intestines of guinea-pigs previously shown. He then resumed the debate, which he said had simplified comprehension of the subject, for the points of difference between himself and Professor von Pettenkofer were diminished by the latter's admission of the fact of individual immunity and the influence of traffic in spreading the disease. Nor did he himself deny that humidity of soil has some influence, especially in the surface layers, where organic matter decomposes; but this condition is only one, and not the foremost, of many factors. Local immunity is not explained by it solely, being due to very complex conditions, as exemplified in the case of Lyons. Mooltan, a town of the desert, is almost the sole place in India that enjoys immunity. He gave further instances of the risk of traffic with the cholera sick, and stated that the dangers of ship traffic do not depend on the extent of an epidemic on individual ships, but on the number of vessels attacked by cholera, and this is comparatively large. Turning to the third point proposed for discussion, he said there was no authentic fact of the atmospheric transmission of cholera. It might occur exceptionally, but as a rule the atmosphere only influences a cholera epidemic by the fact that the virus retains its power for a longer period in moist air, and speedily perishes in dry air. The soil may influence the spread of cholera by its physical property. It had been said that a clay soil was to a certain extent protective, but he cited instances showing that this was not invariably the case. He showed by various examples from India, Egypt, Paris, Genoa, and Naples that the subsoil water is no index of the diffusion of cholera; it is the various kinds of putrefaction in the superficial layers that are the important conditions in soil. Of the three factors, *x*, *y*, and *z*, which Professor von Pettenkofer declared some years ago to be necessary for an epidemic, was it the *x* or the *y* which is represented by the bacillus? Drinking water is of some importance; a certain percentage of individuals are protected from cholera by pure water, as was seen by a reference to plans and tables from Calcutta (especially Fort William) and from Bombay, Madras, Nagpore, Pondicherry, Alexandria, and Cairo.

Dr. GÜNTHER said that in Saxony during the epidemics of 1865, 1866, and 1873 the mortality among medical men, nurses, and gravediggers was not higher than the mean of the whole population; there was in 1865 and 1866 a higher rate amongst those who washed the linen of cholera subjects, but not in 1873. He gave examples from Elsterberg and the Gerbergasse at Dresden as apparently in favour of the protective nature of a clay soil. In Saxony the height of the epidemic of 1873 corresponded with the acme of the ground temperature at a depth of one metre.

Professor von PETTENKOFER read a paper on the Drinking Water Theory and the Immunity from Cholera of Fort William in Calcutta. He pointed out that according to Dr. Mouat' the disappearance of cholera from Fort William was brought about not merely by the new water-supply, but by other extensive sanitary measures, including a thorough sanitation of the soil. The same obtained in other places, where an improved supply of drinking water has been regarded as the cause of the disappearance of cholera, for more careful scrutiny showed that the observation had been defective, or that many other hygienic measures had co-operated. Pure water *per se* was not a specific prophylactic against cholera, and he deemed it essential to assert this because people have been content to believe that with the introduction of pure water enough had been done, and therefore to neglect the more important matter of sanitation of the soil.

The final sitting took place on May 8th, when the debate on points 2 and 3 was resumed by Professor von PETTENKOFER, who said that when he proposed to regard the subsoil water as the index of cholera, he had not meant especially the rise and fall of the subsoil water, but only the variations indicated by the hydrometer in the humidity of the soil overlying the water. It was only such variations that were of etiological importance, and only those wells could be employed for measurement which did not change their level from other causes—e.g., not those depending solely on the levels of the nearest river. He postponed his reply to Professor Koch's criticisms to another opportunity, as he had not at hand data referring to many of them, and time would not permit of his entering upon them all.

Dr. B. FRAENKEL said that, since it had been clearly shown that the winter latency of an epidemic could be explained by the known vital tenacity of cultures of the comma bacillus, there only remained of the reasons advanced by Professor von Pettenkofer against the view that the bacillus is the cause of cholera this—viz., that the local and periodical characters of cholera epidemics are not to be explained by the vital peculiarities of the bacillus. But, once admit the bacillus to be the cause of cholera, and this difficulty disappeared. It traces the origin of an epidemic to something external to the human body, with certain special conditions, local and periodical, in addition. He asked Professor von Pettenkofer if, in what is known of such conditions, there are facts which preclude the view of the comma bacillus being the cause of the disease.

Professor von PETTENKOFER said that such conditions depend upon (1) the physical character of the soil, permeability; (2) its humidity and variations in this; (3) its impregnation with organic matter. He would willingly recognise the comma bacillus, and any bacillus considered by bacteriology to be the cause of cholera, as the special cholera virus, and abandon his doubts, if it were proved that the micro-organism answered to epidemiological facts upon local and periodical conditions. In that case it must, like the malarial virus, have some relation to the soil.

Professor VIRCHOW said that when Professor von Pettenkofer commenced his studies on cholera the idea was in vogue at Munich that a fungus was the cause of cholera; but the notion was corrected by Thiersch's experiments on white mice; and it was thought that the virus was formed later in the dejecta. Although these experiments may have been erroneous, yet Professor von Pettenkofer had not given up the notion of this late development of the cholera germ. In the inquiry into the various conditions in which fæcal matters are found, the soil very naturally occupies the foreground; and from this point of view Professor von Pettenkofer's labours had thrown much light. But whilst fully acknowledging their merit, Professor Virchow could not understand their exclusive standpoint. Why should the material that causes cholera, and that is present in the soil, be not also capable of passing into drinking water? Theoretically there was nothing opposed to that. Practically the question is reduced to the somewhat rough-and-ready one as to whether an improved water-supply can limit cholera epidemics; but there are many kinds of impurity in water. In reference to Professor von Pettenkofer's objection to the experience gained on this head—e.g., the facts Professor Koch related about Fort William that other improvements in sanitation occurred at the same time,—it must still be asked whether these other changes were also of value. In introducing a good supply of water, drainage was also improved, and both had undoubtedly a favourable effect. It is with cholera as with typhoid. Thus at Halle a sudden and permanent reduction in the frequency of typhoid followed the introduction of drainage, and buildings supplied with good drinking water have remained free from the disease. Yet it by no means follows that typhoid and cholera have nothing to do with the soil. It has been proved that the comma bacillus can exist in water; and were another fungus alleged to be the cause of cholera, the same must be proved of it. By subsoil water he did not understand, with Professor von Pettenkofer, the water that soaks through from the surface. Subsoil water is an entity, and it is impossible to split it into different kinds. He had always maintained that fungi got their nutriment only in the uppermost layers of the soil, and this was important, since every kind of impurity could not be drained off. Dr. Babes had shown that in the struggle for existence the comma bacillus is speedily overborne by putrefractive bacteria; and, therefore, there must needs be varied and special circumstances for it to flourish, and further researches upon water on linen, &c., were required to elucidate tnem. Nor could personal predisposition to cholera be disputed, and in this connexion it must be remembered that the attack of cholera usually occurs during digestion, when living organisms might be passed into the bowel without being long in contact with the gastric juice. The atmosphere must also play some part, as in the diffusion of particles in the unpacking of *linen and their conveyance to the mouth.*

Professor KOCH reserved his arguments against Professor von Pettenkofer's views to another opportunity.

The fourth point was then discussed—viz., on the practical measures for attacking cholera. These were summarised by Professor KOCH as follows:—1. Measures for the direct destruction of the infective material, disinfection of dejecta, destruction or disinfection of linen, &c. 2. Sanitary works for carrying the virus away, drainage, good water-supply. 3. Competent supervision of communities for the speedy diagnosis of the earliest cases, in order to nip the epidemic in the bud; the sick must be isolated or so guarded as to prevent contagion. Infected houses to be vacated by the healthy, who must be supervised. 4. The instruction of the public so as to allay their fears, and make them aware of *the dangers of uncooked food,* unboiled well water, with particular warning against the use of infected linen.

Dr. GÜNTHER said one difficulty was to determine what water was dangerous and in what circumstances wells should be closed.

Professor KOCH said that no general rule could be laid down; but it was essential not only to ascertain the chemical characters of the water, but to determine how many and what kind of micro-organisms are present in it.

Dr. GÜNTHER alluded to the supervision of railway travellers, its difficulties and impossibilities, and its doubtful utility.

Professor KOCH said the regulations in this regard must be dictated in the humanitarian sense, as needed for the protection of the sick and in the interest of his companions.

Dr. S. NEUMANN pointed out that premonitory diarrhœa is excluded from control, and must yet be regarded as cholera.

Professor KOCH agreed, provided that comma bacilli were present in the dejecta.

Dr. KÖHLER, in view of the strict control over ship traffic, would like to support a practicable revision of railway traffic without disturbing travellers, so that the charge may not be brought against officials that nothing is done for the protection of people.

Dr. MEHLHAUSEN urged the importance of cleansing the water-courses, especially the smaller ones; and Dr. EULENBERG illustrated this point by instances of the spread of cholera through the Salzbach at Wiesbaden and the Schwarzbach at Liegnitz.

Professor VIRCHOW called attention to Bacon's portable disinfecting apparatus, and mentioned that the Berlin Town Council were about to erect special disinfecting establishments. Isolation of the sick was necessary, but a land quarantine would be impracticable with our complicated travelling system.

Professor KOCH laid stress on the disinfecting property of drying. His observation that the comma bacillus is rapidly killed by drying has been confirmed on all sides. Where carbolic acid and disinfection by steam were inapplicable, the virus could be killed by drying—e. g., in the case of furniture and dwellings. In many cases fresh lime-washing of walls would suffice. In reply to Dr. Pistor, he said that corrosive sublimate destroys the bacilli, but he did not recommend it as a disinfectant on a large scale.

Professor von PETTENKOFER stated that measures of isolation, disinfection, &c., did not determine the mildness or severity of an epidemic; but he admitted that measures must be taken to calm the public mind.

Dr. KERSANDT warned against *laissez-faire* on the part of officials on the outbreak of an epidemic. The State interest demanded that the public should feel that protective measures were taken, for that was the best way of calming them; and the State could do much to protect against cholera invasion. The sick must be isolated as far as possible, the water-supply supervised, and no measures which experience proves of value be neglected.

Professor VIRCHOW said that in Berlin in 1848-9 the view was held, and acted upon, that cholera was not contagious. The mortality was 12 per 1000, the highest experienced in Berlin. More was to be gained as guiding to what was to be done by the experience obtained from the individual case than the observation of the epidemic as a whole.

Professor MEHLHAUSEN spoke of precautions in the interment of cholera subjects, and, no member offering any further remarks, the conference was brought to a close by Professor Virchow thanking the foreign members for their attendance and their contributions, which was acknowledged by Professor von Pettenkofer, who said they had a common aim, *and could meet to pursue it although their opinions might* differ.

ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

A MEETING of this Association was held on Wednesday last, at 5.30 P.M., in the rooms of the Medical Society, Chandos-street, W. The chair was taken by Mr. George D. Pollock, and the meeting was well attended. The chairman in opening the proceedings said that the Committee of the Association had endeavoured to carry out the instructions intrusted to them. They had had one conference with a deputation of the Association of Members, at which the chief subject under consideration was the mode of election of members of Council. This question was patiently discussed on both sides, and the conclusions at which the Committee of the Association of Fellows had arrived were embodied in the resolutions which had been submitted by post to the members of the Association. Speaking of the deputation of Fellows from the Association to the Council of the College, Mr. Pollock said the deputation was fairly and kindly received, but the printed report which had been circulated showed how little was gained, by the conference with the Council of the Royal College of Surgeons. And although on the occasion of the conference he (Mr. Pollock) *specially addressed the chairman of* the sub-committee on the point that no Charter should be applied for without a further meeting between the Association of Fellows and the Council of the College, and had received the answer that this request should be carried out, yet the Council did not think it necessary to comply with that request or to treat it with any more courtesy than by a notice given to the secretaries of the Association that the Council had proceeded to the Home Secretary with a view of obtaining the new Charter. Having this state of affairs in view, the Committee of the Association had consulted together and had proposed to address a letter to the Home Secretary praying him not to approve the new Charter before the Fellows of the said College had represented their views to the Home Office, and before the President of the Association should have explained the objects which the Association had at heart.

A sub-committee for the purpose of drawing up the letter was nominated, and the letter was to read as follows:—"We beg to bring to your notice the following resolution, unanimously adopted at a meeting of the Committee of the Association of Fellows of the Royal College of Surgeons comprising at least one-fourth of the whole number, *held on* May 11th, 1885—viz., 'That a letter be addressed to the Secretary of State for the Home Department praying him not to approve of the amended Charter about to be applied for by the Council of the Royal College of Surgeons of England until the Fellows of the said College have had an opportunity of representing their views in the matter.' We are authorised on behalf of the Association to state that the views entertained by the Fellows of the College are in many important respects opposed to those held by a majority *only of the Council,* which consists of only twenty-four Fellows. In preferring this request, we would commend to your notice that we have good grounds for believing that no Charter will be acceptable to the body of Fellows and Members of the College which does not include the recommendations proposed by the Association of Fellows, but many of which have been rejected by the Council of the College. We beg to enclose a copy of these recommendations with the replies of the Council." Signed by G. Pollock, A. Willett, J. Tweedy, and W. Bruce Clarke.

The meeting unanimously expressed its approval with the terms of the letter. The next business was the discussion of the following resolutions which had been drawn up by the Committee of the Association:—

1. That it is inexpedient for the Association of Fellows to unite with the Association of Members in its demand for representation. 2. That if, however, the Members should succeed in obtaining the right to elect members of Council, it is desirable that the existing rights of the Fellows should be adequately protected in the new Charter.

Some discussion took place on the nature and consequences of the conference between the Association of Fellows and that of Members. The secretary, Mr. Bruce Clarke, said that he had been in communication with Mr. Steele, the secretary of the Association of Members. The proposition "That the Fellows and Members (of the College) unitedly shall elect the Council, but no one shall sit on the Council unless he be a Fellow or a Member of ten years' standing," was the principal subject which the Committees of the two Associations had discussed. The last letter received from the secretary of the Association of Members asked what terms the Association of Fellows would be agreeable to accept. Mr. Alban Doran, Mr. Butlin, Mr. Gant, Mr. Barnes, and others spoke on the question, and the first resolution was moved and seconded, when

Mr. John Tweedy proposed as an amendment the following:—"That in the opinion of the Association of Fellows it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, if Members of the College were empowered to take part in the election of members of Council, provided, firstly, that no Member shall be eligible to vote until he has been such Member for a period of at least ten years; and, secondly, that the number of members of the Council elected by the Members of the College shall not exceed one-third of the whole Council." In proposing this amendment, Mr. Tweedy said that he had purposely abstained from conferring upon it with the other members of the Committee of the Association of Fellows. He confessed that, had the Members of the College never raised the question of direct representation on the Council, he should not have thought of claiming such representation for them. Small electoral bodies had a certain amount of convenience, and he considered that there was such a body in the order of Fellows of the College. Still, as we were brought face to face with a great question for reform, we ought not to shrink from it. It must be remembered that all these attempts at reform had come about us as the result of the general meeting of Fellows and Members held in March, 1834. Notwithstanding the representations made from all quarters to the Council of the College, this autocratic body had seen fit to reject all proposals and had simply increased its own autonomy. Speaking next of the rights of Fellows and Members respectively, Mr. Tweedy said that no doubt the President and others, his seniors, could remember the heartburnings that existed when the order of Fellows was created, and some would know as a matter of history the disgraceful circumstances under which the College originated. The old Corporation of Surgeons had been guilty of many acts of illegality, and parliamentary influence was brought to bear, happily without success, to condone these illegal acts. But though Parliament rejected these overtures, yet the part of courtly intrigue was well played, for George III. was prevailed upon to grant a Charter in which the Members of the College were entirely ignored. The Council was self-elective, and the Members of the College were left out of consideration altogether. After forty-three years of this disgraceful existence, the creation of the order of Fellows must be looked upon as a distinct advance, though it was a most arbitrary act, for the friends and relatives of members of the Council were made Fellows without any special claims. From that time to this nothing had ever been done for the Members, who were an increasing and intelligent body of men. They carry on the hard work of the medical profession; they were the ministers of surgical life. So that he thought that direct representation on the Council would not only be conducive to the welfare of the profession, but the Members of the College would feel that they were drawn to the College by bonds of interest and affection. And if these things came about, it seemed to him that the College of Surgeons would have a more brilliant career than it had ever had yet. He would limit the eligibility of the Members to those of ten years' standing, and this proposal would practically reduce the constituency of the Members to between three and five thousand, which would be composed of staid practitioners and men of mature intelligence. Feeling that their influence in the Council should be limited, he had introduced the final clause in his amendment.

Mr. Alban Doran seconded this amendment, which he considered was based on sound principles. In moving the amendment, he thought Mr. Tweedy had shown himself to be a practical politician, for he faced matters as they were likely to turn out, and not as one should wish them to be.

Mr. Oliver Pemberton accepted the amendment with a slight reservation to the effect that the Members should hardly be allowed to swamp the Fellows in the Council. He considered that the number of Members voting should not exceed the number of Fellows voting.

Mr. A. Willett also approved of the substance of the amendment, but regarded it rather as a rider or addition to the resolutions which had been submitted to the meeting. The letter read by the secretary from Mr. Steele showed that the Association of Members were willing to talk over the matter so that a common *modus vivendi* could be maintained between the two Associations.

Mr. John Tweedy said that he had made his proposition as an amendment on account of the wording of the first resolution.

Mr. Willett, Mr. Butlin, Mr. Macnamara, and others contended that there was really nothing in the proposed resolutions which could be construed as antagonistic to a mutual understanding between the Associations.

Mr. J. Wickham Barnes thought that a second interview should be had with the Association of Members before any details were arranged.

It was urged, however, that the amendment might be regarded as a basis on which the committees of the two Associations could meet and discuss.

Mr. Pollock suggested that the first resolution should be verbally altered.

Mr. R. Davy said that he was horrified on reading the first resolution, which began in so unsympathetic a manner as "that it is inexpedient," &c. He believed in the old-fashioned proverb—"Vis unita fortior." It was not long ago, when danger threatened the College, that Mr. Trimmer, the secretary, had no hesitation in applying by letter to all Members. If Members were applied to in times of war, surely they had a right to be applied to in times of peace. His arguments were used in favour of a common platform, and the establishment of a common fellowship; and he thought the question was pretty much the same as that which had been fought out throughout the political world recently.

Mr. Willett and Mr. Tweedy then consulted, and the following amended resolution was put to the meeting and unanimously carried:—"That whilst it is inexpedient for the Association of Fellows to unite with the Association of Members in its demand for universal suffrage and for equal representation on the Council, yet, in the opinion of the Association of Fellows, it would conduce to the welfare of the Royal College of Surgeons, and would tend to promote the interests of medical polity and education, if Members of the College were empowered to take part in the election of members of Council, provided that no Member shall be eligible to vote until he have been such Member for a period of at least ten years."

After some discussion, it was moved by Mr. Tweedy, and seconded by Mr. J. W. Barnes, that a copy of the resolution be forwarded to the Association of Members with a view of informing them of the policy adopted by the Association of Fellows as a basis on which the committees of the respective Associations might take conference. With such a policy, it was felt that the Associations might go to the Home Secretary, confident in their combined cause.

The ceremony of laying the foundation-stone of the Northern Hospital, Winchmore-hill, for the reception of fever and small-pox cases above the pauper class, took place on the 16th inst. The building, which is in the modern style, is of brick, and consists of two storeys, with accommodation for 512 patients and the necessary officers and staff. The cost is estimated at £13,580.

SANITATION IN THE STRAITS SETTLEMENTS.

THE year 1884 was a healthy one in all the three Settlements. There was no epidemic of any kind, and the comparative freedom from contagious disease, even in sporadic forms, must be a subject of much congratulation to the various medical officers engaged in the institutions. The only cases of cholera, or choleraic diarrhœa, reported as having occurred in Singapore town took place in the Rochor district during December, and immediately following an unusually heavy rainfall. The persons seized occupied huts situated on the edge of the Kallang river, the water from which had been used for drinking purposes. Doubtless the heaviness of the fall had stirred up much organic débris from the sides and bed of the river, which had contaminated the water to a fatal degree. Four cases occurred in two days, all of which ended in death. The inhabitants were forbidden to drink from the river, town water was supplied to them, and the disease was at once arrested. It is a fact worthy of observation and beyond dispute, that the cases of cholera which now occur in Singapore do so almost always in a locality where town water has been found impossible or difficult to be procured. The drainage of the town generally is improving year by year, though in certain districts much remains to be done. There were admitted into the several civil hospitals in the Settlements 740 Europeans and 14,357 natives, which, together with 28 Europeans and 1030 natives who remained at the close of 1883, gives a total of 768 Europeans and 15,387 natives treated during the year. The number of vaccinations performed was 2341 at Singapore, 2436 at Penang, 3583 in Province Weilesley, and 2801 in Malacca. Comparing the mean temperature of the different stations, it is interesting to note that Singapore recorded the lowest temperature, Malacca next, then Penang, and lastly Province Wellesley; the variations were very slight, the difference between the highest (83°) and the lowest being only 1·9°. The highest temperature recorded during the year was 96·5° in Province Wellesley. At Singapore the total fall of rain during the year was 80·15 inches, against 71·13 inches in 1883; at Penang, 87·56 inches, against 87·74 inches; at Province Wellesley, 77·53 inches, against 81·73 inches; and at Malacca, 84·11 inches, being 7·08 less than that of the preceding year.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5767 births and 3487 deaths were registered during the week ending the 16th inst. The annual death-rate in these towns, which had been equal to 23·4, 21·1, and 20·2 per 1000 in the preceding three weeks, was last week 20·4. During the first six weeks of the current quarter the death-rate in these towns averaged 22·2 per 1000, against 23·3 in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 10·9 in Brighton, 14·2 in Bolton, 15·1 in Derby, and 15·5 in Bristol. The rates in the other towns ranged upwards to 25·0 in Sunderland, 27·7 in Manchester, 30·3 in Newcastle-upon-Tyne, and 33·4 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 449 and 481 in the previous two weeks, declined again to 463 last week, and included 143 from measles, 126 from whooping-cough, 50 from small-pox, 45 from "fever" (principally enteric), 37 from scarlet fever, 33 from diphtheria, and 29 from diarrhœa. No death from any of these principal zymotic diseases was returned last week either in Norwich or in Derby, whereas they caused the highest death-rates in Sunderland, Blackburn, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Birkenhead, Manchester, and Newcastle-upon-Tyne; from whooping-cough in Plymouth, Oldham, and Blackburn; from scarlet fever in Cardiff and Sunderland; and from "fever" in Salford, Cardiff, Sunderland, and Plymouth. The 33 deaths from diphtheria in the twenty-eight towns included 21 in London and 2 in Brighton. Small-pox caused 62 deaths in London and its outer ring of suburban districts, exclusive of 30 deaths of London residents in the hospital ships and camp at Darenth. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 1282 and 1361 on the preceding two Saturdays, further rose to 1364 at the end of last week; the admissions, which had been 246, 354, and 315 in the previous three weeks, declined to 211 last week. The Highgate Small-pox Hospital contained 69 patients on Saturday last, 10 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined in the preceding five weeks from 512 to 287, were last week 291, and 60 below the corrected weekly average. The causes of 82, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Sunderland, Brighton, and in three other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Bristol, Sheffield, and Norwich.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had steadily declined in the preceding six weeks from 25·0 to 20·6, rose again to 23·4 in the week ending May 16th, and exceeded by 3·0 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 17·2 and 17·5 in Edinburgh and Leith, to 25·5 in Paisley and 29·7 in Glasgow. The 570 deaths in the eight towns included 24 which were referred to whooping-cough, 19 to measles, 19 to diarrhœa, 8 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 4 to scarlet fever, and not one to small-pox; in all, 79 deaths resulted from these principal zymotic diseases, against 81, 64, and 55 in the three preceding weeks. These 79 deaths were equal to an annual rate of 3·2 per 1000, which was 0·3 above the mean rate from the same diseases in the twenty-eight English towns. The 24 fatal cases of whooping-cough showed a further decline of one from the numbers in recent weeks, and included 9 in Glasgow, 6 in Dundee, and 3 in Greenock. The 19 deaths from measles, however, showed an increase, and included 18 in Glasgow. The 19 deaths attributed to diarrhœa showed a considerable increase upon recent weekly numbers, and exceeded by 7 the number returned in the corresponding week of last year. Six of the 8 deaths from "fever," 4 of the 5 from diphtheria, and all the 4 from scarlet fever, occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 124, 117, and 95 in the preceding three weeks, further declined to 95 last week, and were 53 below the number returned in the corresponding week of last year. The causes of 82, or more than 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 34·0, 33·5, and 28·5 per 1000 in the preceding three weeks, rose to 35·0 in the week ending the 16th inst. During the first six weeks of the current quarter the death-rate in the city averaged no less than 32·8 per 1000, the mean rate during the same period not exceeding 20·0 in London and 18·5 in Edinburgh. The 237 deaths in Dublin last week showed an increase of 44 upon the number in the previous week, and included 14 which resulted from measles, 7 from whooping-cough, 5 from diarrhœa, 4 from scarlet fever, 3 from "fever" (typhus, enteric, or simple), 1 from diphtheria, and not one from small-pox. Thus 34 deaths resulted from these principal zymotic diseases, against 40 and 22 in the preceding two weeks; these 34 deaths were equal to an annual rate of 5·0 per 1000, the rate from the same diseases last week being 2·9 in London and only 0·4 in Edinburgh. The fatal cases of measles in Dublin, which had been 17 and 12 in the previous two weeks, rose again to 14 last week. The 7 deaths from whooping-cough exceeded the number in any recent week, and those from scarlet fever, "fever," and diarrhœa were also more numerous than those returned in the previous week. Six inquest cases and 7 deaths from violence were registered within the city; and 76, or nearly a third of the deaths, were recorded in public institutions. The causes of 35, or nearly 15 per cent., of the deaths registered during the week were not certified.

SALFORD HEALTH BULLETIN.

The Quarterly Health Bulletin relating to the first three months of this year affords most satisfactory evidence of the health condition of the borough of Salford. The annual death-rate did not exceed 20·7 per 1000, which was 3·9 below the rate in the corresponding periods of the five preceding years; it was also 2·0 per 1000 below the mean rate that prevailed during last quarter in the twenty-eight large English towns. The information bearing upon the notification and isolation of cases of infectious disease shows the result of energetic sanitary organisation carried out with tact, the beneficial effect of which upon the health of the borough cannot well be over-estimated. The calculated death-rate of children under five years of age in the last quarter was 53·0 per 1000 living, ranging in the four registration sub-districts from 33·6 in Broughton to 72·9 in Greengate. No more conclusive evidence is needed that the sanitary authority of the borough should look for further health progress in Greengate registration sub-district. We should be glad to see other large towns following the example of Salford in the publication of Quarterly Health Bulletins containing similar statistical information, reflecting in so trustworthy a manner the health of the population.

THE SERVICES.

Among the officers who left Sawakin in the *Jumna* on the 17th inst., sick, was Surgeon-Major J. J. Crean. Staff Surgeon P. A. Hayes and Surgeons Hay and Mander are reported as sick on board the hospital ship *Ganges*. Amongst the officers who left Sawakin for England on the 15th inst. were Staff Surgeon C. J. Holmes and Surgeon W. C. Beevor. The following officers have left Egypt for England invalided: Surgeon-Major J. Kinahan and Surgeon C. E. Faunce.

WAR OFFICE.—*Army Medical Staff*: Brigade Surgeon George Langford Hinde to be Deputy Surgeon-General, vice Edward Malcolm Sinclair, M.D., placed on temporary half-pay; Surgeon-Major William Temple, M.B., V.C., to be Brigade Surgeon, vice George L. Hinde; Surgeon-Major James Shand Duncan, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Charles Wyat Watling is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Edward Harford Lloyd, M.B., is granted retired pay, with the honorary rank of Brigade Surgeon; James B. Clarkson (L.R.C.P. & S. Edin.), Lieut. 19th Lancashire Rifle Volunteers, has been appointed to a commission in the Reserve of Officers.

Correspondence.

"Audi alteram partem."

THE ELECTION OF COUNCILLORS OF THE ROYAL COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—It may simplify the action of the Fellows at the coming election for Councillors at the College of Surgeons if you will allow me to say that it is neither my wish nor my intention to offer myself for re-election.

I am, Sir, yours obediently,

Cavendish-place, W., May 16th, 1885. JOHN ERIC ERICHSEN.

"PNEUMOTHORAX FOR HÆMOPTYSIS."

To the Editor of THE LANCET.

SIR,—In an annotation last week you were good enough to speak favourably of my plan of producing artificial pneumothorax. Will you allow me a brief space to point out some advantages which this plan offers over the method by free incision besides the ones you referred to. By using a fine hollow needle the operation can be done without moving the patient in his bed, without causing any pain, and without chloroform, therefore circumstances of great moment when the patient is enfeebled by disease or loss of blood. Moreover, the pneumothorax can be induced very gradually, and can be suspended or pushed on at the option of the operator. If it seemed desirable, very considerable pressure could be brought to bear on the lung; on the other hand, if for any reason it were thought advisable, by merely reversing the process, the injected air could be immediately withdrawn, and the *status quo ante* brought about. Once the chest-wall is incised we lose further control over its mechanism, and cannot undo our operation if for any reason it fails to fulfil our requirements. You justly point out the limited application of such a procedure, and yet if it can be undertaken without risk or danger, and if the operation can, so to speak, be undone without any difficulty, it may come to be tried at an earlier stage before adhesions to the chest-wall, solidification or other mechanical causes render the lung incapable of collapsing. Such a plan appears to me thoroughly rational and full of promise; it is but an extension of the principle of physiological rest to a diseased organ incapable of getting rest in any other harmless way. Where there are small cavities or aneurysms it is not improbable that a cure may be obtained in a few cases, for it would bring the walls of such cavities into contact with each other and so promote adhesion between them, and obliteration.

I am, Sir, yours faithfully,
ROBERT WM. PARKER.

Old Cavendish-street, W., May 18th, 1885.

PERSONAL EXPERIENCE OF COCAINE AS AN ANÆSTHETIC.

To the Editor of THE LANCET.

SIR,—As I believe I am the first member of the profession who has undergone a serious operation under the influence of the new anæsthetic, I feel that I ought to place my experience on record.

About eight years ago, being then in my sixty-second year, and finding that the sight of my right eye was not so good as formerly, I consulted Sir William (then Mr.) Bowman, who informed me that I was suffering from cataract. Finding my left and best eye failing me considerably during the past autumn and winter, I determined to have the right eye operated upon, and with this object placed myself under the care of Dr. Bell Taylor of Nottingham. As I have always had a strong tendency to squeeze the lids forcibly together on slight provocation, and instinctively resent in an exaggerated degree anything like the impact of a foreign body, even of a drop of water, I fully expected it would be necessary to inhale some general anæsthetic, although I dreaded the possible ill-effects of the vomiting and retching which either ether or chloroform might occasion. I had heard, of course, of the employment of cocaine in order to annul sensation during the removal of foreign bodies from the surface of the eyeball and in other slight operations, but never for one moment expected that it would suffice for the extraction of cataract in a hypersensitive individual like myself. The doctor, however, assured me that I should not feel it, and, to my great surprise, I found that this statement was literally true. The solution of cocaine was applied to my eye three times at intervals of five minutes before the operation, and each step of the operation was explained to me by Dr. Taylor as it was successively accomplished; the preliminary incision was completed without pain, as was also the excision of a small portion of the iris made in the upward direction—a satisfactory answer it appears to me to the query, Does cocaine affect deep-seated parts?

I can truthfully affirm that the whole affair was painless, that the cataract was removed without pain, that I have had very little pain or discomfort since, and can now, little more than a fortnight after the operation, see objects distinctly, make out words of small print, and am improving every day.

You have had satisfactory evidence of the value of cocaine before, but I venture to think none so conclusive as this which I have now to offer.

I am, Sir, your obedient servant,

Staindrop, Darlington. WM. COPELAND, M.R.C.S.

THE PROSECUTION OF IRREGULAR PRACTITIONERS.

To the Editor of THE LANCET.

SIR,—It is instructive, after reading the opening speech of Sir H. Acland *in re* the punitive powers of the General Medical Council, to turn to the daily papers to see how well the Incorporated Law Society protects the interests of solicitors. Hardly a day passes without one finding that a prosecution of some unqualified legal practitioner has been undertaken by that body, or that some black sheep in the profession has been "struck off the rolls." As the case appears in the daily press, the public hears of it, and is instructed thereby. Contrast this with what happens at the General Medical Council: the proceedings are secret, and the result only appears in the medical press, and no further steps are taken to see that the man struck off the Register does not still practise. No prosecution for unqualified practising has been ever attempted by our ruling authority, and I do not suppose the general public knows of its existence. Our corporations or universities do not help us in the least to keep up the honour and dignity of our profession. Something ought to be done, or else men will soon ask, What is the advantage of being qualified at all? What with unqualified men, prescribing chemists, prescribing dentists, bone-setters, and the large race of spinsters, parsons, and others who do not hesitate to advise their friends to try their pet quack remedy, it is difficult to see the special advantages our expensive training has given us when a living has to be made for ourselves and those dependent upon us. It is a temptation to younger men to fling aside professional dignity when they find that fortunes are made by their unqualified opponents, who by their humbug and blatant advertisements attract the "custom" which the "gentleman" and the "educated" man loses because he has some love for the honour and dignity of his profession. We have a right to demand that we should be protected from this long-continued abuse, and that the public should be protected as well. If any further powers are needed by the General Medical Council—the General Meddling Council is a better name for it,—these powers can easily be obtained from Parliament. At present all we have to show for our registration fee is a single copy of the Register given (?) at registration. Other cases occur to me, but I must not take up more of your valuable space.

I am, Sir, yours truly,

Canonbury-place, May 19th, 1885. A. GEORGE BATEMAN.

"SUCCESSFUL ŒSOPHAGOTOMY FOR REMOVAL OF A HALFPENNY SWALLOWED THREE YEARS PREVIOUSLY."

To the Editor of THE LANCET.

SIR,—In your notice of the above case in THE LANCET of Saturday last you say that the child was treated for asthma, and that the swallowing of the halfpenny was lost sight of until this fact was elicited from the history of the patient given at the hospital a few weeks ago. As the little fellow was under my treatment for some months before he went, for the last time, to the Queen's Hospital, I beg leave to give the following short history of the case as far as it fell under my observation:—The child was first brought to me on Sept. 9th of last year, and at this time I learned from his mother that he had swallowed a halfpenny on Christmas Day, 1882. According to the mother's statement he was taken immediately to a surgeon, but as at the time the symptoms were not very urgent, no attempt was made to extract the coin. Subsequently he was taken twice to the Children's Hospital and once to the Queen's. According to the papers given to the mother he was treated at these institutions for bronchitis and asthma, and on the second occasion of her going to the Children's Hospital she was even ridiculed for supposing that the halfpenny had anything to do with the chest symptoms. When he came to me there was great difficulty both in breathing and swallowing, and much emaciation. Loud mucous râles were heard all over the chest, and there was impairment of resonance on the right side. I then gave it as my opinion that the halfpenny was impacted in the œsophagus, and by its pressure on the posterior wall of the trachea had led to the dyspnœa, and probably to some more serious change in the lung itself. The mother was unwilling at the time to take him again to the hospital, especially as I told her that in my opinion any attempt at removal would prove injurious, and perhaps fatal. In this I am glad to find that I was wrong, and that the skill of the surgeon has triumphed where the care of the physician was unavailing. I have only to add that while under my care he was treated with Parrish's syrup and cod-liver oil, and that for a time he improved greatly.

I am, Sir, yours obediently,

Birmingham, May, 1885. WILLIAM J. NOTLEY, M.D.

MANCHESTER.

(*From our own Correspondent.*)

VICTORIA UNIVERSITY.

AT the last meeting of the Court of the Victoria University, several matters of interest to the profession, and especially to medical students, came up for consideration. On the recommendation of the Council, it was resolved that candidates for the B.A. degree may, if not required to present both Latin and Greek in their intermediate or final examination, present in lieu of one of these languages, either French or German at their preliminary examination. The proposed interchange between the intermediate B.Sc. examination (Faculty of Science), and the preliminary examination in science (Faculty of Medicine), was postponed for future consideration. The following resolution, affecting especially old students of Owens College, was adopted, viz.: That anyone qualified before this year shall be admitted to the intermediate and final examinations for the degree of M.B. without having to pass the entrance examination in arts, or the preliminary examination in science, provided they have complied as students with all other requirements. This will enable many men who were students of the College before the granting of the charter to obtain a degree in medicine by passing examinations in professional subjects only. In the report presented to the Court allusion was made to the great loss the College and the University had sustained in the death of Dr. Watson, whose death, after a lingering illness, was chronicled in your pages recently. By his death the College loses both its professor of anatomy and its dean, Dr. Watson having been appointed to the latter office on the resignation of Dr. Gamgee last year. The latter has again, *pro tem.*, taken up the duties of dean. Rumour is already busy with several names for the vacant post of professor of anatomy, amongst them Dr. A. Young, who would be a formidable competitor against any candidate, he having for many years been senior demonstrator in the dissecting room prior to holding his present posts at the Infirmary and at the Salford Hospital.

THE CONSUMPTION HOSPITAL.

At the recent annual meeting of the subscribers to the Hospital for Consumption a very energetic report was submitted. This, the only hospital in the midst of so dense a population for the treatment of consumption and diseases of the chest and throat, has long laboured under many disadvantages. The accommodation has for some time past been inadequate to its needs, the numbers of patients increasing greatly every year, numbering for the year ending 1884 no less than 3032. The accommodation for the in-patients has been so defective that the Committee have taken a building at Bowdon, situate outside the smoke of the city, and have adapted it for the reception of sixteen patients, which accommodation is ultimately to be increased to sixty beds as soon as the necessary funds are raised, the amount now required being some £10,000. The out-patient department is also to be reorganised and the staff increased by the addition of another assistant physician. The income last year was £865, whilst the estimated expenditure for the coming one is estimated at £1500 at least, so that increased support will have to be found if the work of this charity is to be carried on efficiently.

CONFERENCE ON HEALTH AND EDUCATION.

The Conference on Health and Education lately held here may be looked upon as having been very successful, although at one time it appeared likely that the whole project would fall through. Under the presidency of Lord Aberdare the meetings were well attended, and many able papers were read by specialists on the various subjects submitted for discussion. Of course "over-pressure" came in for the lion's share of attention, and on the first day a paper was read by Mr. H. E. Oakeley, Her Majesty's inspector, in which he sought to prove that this mischief had been much exaggerated, whilst Mr. James Newbold, on behalf of the Manchester teachers, read a paper on the opposite side, asserting that over-pressure did exist to a large extent in elementary schools, and the latter view was apparently in favour with the majority of the audience. It was stated by one of the physicians to the Children's Hospital that during the past few years chorea had been more common amongst children of school age, and appeared to be often due to extra school work. Lord Aberdare, in summing up at the conclusion of the Conference, stated as his conviction that the charge of over-pressure existing to any large extent was not proven, and that under any system made for large numbers, if too rapidly followed, a small minority might be adversely affected.

THE SALFORD GUARDIANS AND THE MEDICAL SUPERINTENDENT.

The dispute which has for some time been going on between the Salford guardians and their medical superintendent at the Hope Hospital, and which culminated in the sending down an inspector from the Local Government Board to make inquiry respecting certain charges of neglect brought against the superintendent, has been settled in a satisfactory manner, the inspector reporting that in one or two minor points of discipline and refusal to answer certain questions put by the guardians the superintendent had erred, whilst the more grave charge of neglect was of such a character as could be settled by the guardians themselves, and did not call for the intervention of the Central Department. It is to be hoped that we have now heard the last of this unpleasant matter, which for some time has occupied attention here.

OUTBREAK OF SMALL-POX.

After some years of almost entire freedom from small-pox Manchester is at last suffering from an outbreak which at one time threatened to assume large proportions, as many as forty fresh cases having been reported in one week. Extra accommodation has had to be provided at the Monsall Hospital, and it has also been contemplated to use tents or marquees to meet the sudden emergency that has now arisen. To guard against the extension of the outbreak notices have been issued both by the Manchester and Salford health authorities urging revaccination.

THE CITY BOUNDARIES.

A Bill is now before Parliament for the extension of the city boundaries, by which several of the adjoining townships will be absorbed into the city. Practically they are as much part of Manchester as the city itself, and much of the ordinary municipal work is performed by Manchester—such as gas and water-supply, removal of infectious cases, &c.; and it is certain that in several of them the question of sewage disposal will shortly have to be grappled with, and this can be done by the corporation in a far more satisfactory manner than by the individual action of each local board. Notwithstanding this, one of the largest of these townships—viz., Newton Heath—has opposed the Bill, and will not, therefore, at present, be included within the city boundaries. It is in this township that a large number of cases of small-pox of the present outbreak is occurring.

NEW SOCIETIES.

The new Pathological Society has got well to work, and has had two very successful meetings. The proposed new Medical Society has not got further yet than the preliminary meeting, already noticed in your columns, and it is not unlikely that should the old society make some concessions as to the provision of a reading-room, &c., in a more central part of the city, further steps will for the present be postponed.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

THE COLLEGES SITE AT NEWCASTLE.

AT last this vexed question appears to have approached a settlement by the vote of the Town Council on Friday last, by which it was agreed to allow the Colleges of Medicine and of Physical Sciences sufficient land in an eligible position whereupon to erect suitable buildings adapted to the growing requirements of these institutions. The land had een granted at the price offered—namely, £10,000—by a ery large majority of the Council; so that this fact in itself ill have great weight with the Charity Commissioners, ose sanction is requisite to confirm the transfer. There however, some strong outside feeling still expressed st the sealing of the deeds.

NEWCASTLE INFIRMARY.

little time ago I told you that the weight of medical here was against the continuance of the infirmary in its present objectionable situation. The governors, while admitting this, thought that the erection of a new building was inopportune, but met the difficulty by what was called a temporary enlargement. Everything mundane may of course be considered temporary, but this new extension has a very substantial appearance (at least in bricks and mortar); so that I venture to say the removal of the infirmary from its present position is postponed for a generation at least, while the evils complained of will continue to be felt more and more. Dr. Coley of this city has appeared in the field since I last wrote as a candidate for the vacant post of physician at the infirmary.

SERIOUS ACCIDENT TO CHILDREN.

A very serious and unusual accident occurred on the 13th inst. at Seaham Harbour, Durham, by which seven children received injuries so severe that one has since died, and the lives of the others are in jeopardy. The South Hetton coal line is worked to the shipping station at the harbour in the manner usually adopted in the north—viz., by a wire rope running over sheaves. By some means the rope attached to the laden waggons got off the pulleys at a curved part of the line, and bore against a garden railing where some children were playing; the rope, being then pulled in a straight line, caught the children and threw them into a confused heap. Fortunately, the rope soon ceased running, or it would have sawn them in pieces; as it was, they were found bound down and helpless, requiring considerable force for their extrication. Drs. Gibbon, Beatty, and Dillon were soon able to render assistance. Some of the little ones received severe fractures and contusions; and one, since dead, had both legs fractured, with injury to the back. An inquest has been held, and it would appear from the evidence that some wear or defect in the sheaves was the cause of the rope slipping off.

MEASLES AT JARROW.

The very severe epidemic of measles at Jarrow has induced the medical officer of health to request the Town Council to pay the resident practitioners the customary fee of 2*s.* 6*d.* each case for notification, the health officers stating that it would be of immense advantage in stamping out the disease to know where the cases were. An economic councillor proposed "one shilling" as sufficient, but he could get no one to support him.

Newcastle-on-Tyne, May 19th.

EDINBURGH.

(*From our own Correspondent.*)

THE UNIVERSITIES (SCOTLAND) BILL.

THE General Council Associations of Edinburgh and Glasgow Universities are leaving no stone unturned which may in any way further the object which has brought them into existence. A joint meeting of the London members of the two Associations was held on Saturday at the house of Dr. Chalmers, at which several prominent graduates of both Universities were present. Sir J. Risdon Bennett presided. The meeting was called to adopt measures which may lead to the amendment of the Bill in consonance with the views of the Associations as already defined at their separate meetings. The following resolution, proposed by Dr. Crichton Browne, and seconded by Dr. Chalmers, was unanimously carried: "That this meeting of the London committees of the Associations of the General Councils of Edinburgh and Glasgow Universities is agreed that no Bill for the better administration of the Scottish Universities will be satisfactory which does not provide (1) for a largely increased representation of the graduates in the University Court; (2) for the transference of the management of the funds of the University from the Senatus to the Court; (3) for an extension, under proper restrictions, of the system of extramural teaching." The meeting also adopted a resolution suggesting the formation of kindred Associations in the Universities of Aberdeen and St. Andrews.

VOLUNTEER AMBULANCE ORGANISATION.

The movement inaugurated last winter by Surgeon-Major Evatt amongst the students of the Edinburgh School has prospered in spite of many difficulties, and a very efficient ambulance corps has been formed. Its equipments are as yet imperfect, and it has not yet received that Government recognition which was extended without hesitation to a similar corps recruited from the London hospitals; but, notwithstanding its present small resources and its lack of official encouragement, it bids fair to have a most prosperous career. When recent events necessitated the sudden calling out of a Volunteer regiment in Toronto, the men were accompanied to the front by a Volunteer ambulance corps and bearer companies, completely equipped and thoroughly disciplined; and this corps played a most useful part in the arduous campaign which General Midleton has just brought to a successful issue. Very few of the Volunteer regiments in the old country have any complete provision in this respect, and although on all hands such accompaniments are recognised as essential to the welfare of a regiment in war time, there seems to be a strange obliviousness to the fact that the proper time for their formation and development is in time of peace.

CONCERT AT THE ROYAL INFIRMARY.

A very successful amateur concert was given for the benefit of the patients of the Royal Infirmary on Saturday evening. The large operating theatre made a fairly convenient concert hall, and was well filled by patients and their friends. The audience seemed much pleased with the entertainment which had been provided for them, and warmly expressed their thanks to the performers at the close of the proceedings.

Edinburgh, May.

PARIS.

(From our Paris Correspondent.)

THE TREATMENT OF CHRONIC EMPYEMA BY ESTLANDER'S OPERATION.

CHARLES EDWARD CORMACK, son of the late Sir John Rose Cormack, has just taken his degree of Doctor of Medicine of the Faculty of Paris, the subject of his inaugural thesis being "Traitement de l'Empyème Chronique par l'Opération d'Estlander." The thesis is an octavo volume of 140 pages, in which is given a very good historical account of the various operative measures that have been employed from the time of Hippocrates to the present in the treatment of empyema, the operation known as Estlander's being, according to the author, the only curative treatment for this affection, particularly when accompanied by fistulæ, which, however, should be resorted to only when all other means have failed. The author gives a full description of Estlander's operation; and the work, which contains seven photographic plates, is interspersed with cases illustrative of the advantages of this method over all the others hitherto employed. The thesis winds up with the following conclusions:—1. Against the suppuration and fistula which follow purulent pleurisy, Estlander's operation is the only measure which responds to the indications of treatment of this affection. 2. It is indicated when all other means have failed. 3. One of the strongest contra-indications, and one of the causes of the failure of the operation, is the great extent of the suppurating cavity. 4. Tuberculosis, when not far advanced, is not a contra-indication of the operation; the evolution of tuberculosis may be slackened by early operative intervention. 5. The extent of the costal resection should be proportional to that of the cavity which it is proposed to fill. This resection should always be largely effected, the non-success of the operations hitherto performed being due to insufficient resection.

CAFFEINE AS A LOCAL ANÆSTHETIC.

Dr. Terrier, guided by the chemical analogy that exists between cocaine and caffeine, experimented with the latter on a dog, and obtained complete anæsthesia of the cornea. The next day, a workman presented himself at the hospital complaining of great pain in the eye caused by a foreign body in the cornea. Two drops of a 2·5 per cent. solution of the hydrochlorate of caffeine were instilled into the eye, which so completely anæsthetised the organ that the patient felt no pain whatever during the removal of the foreign body. From these two examples Dr. Terrier declared at a recent meeting of the Société de Chirurgie that he considered himself justified in concluding that the hydrochlorate of caffeine is as much an anæsthetic as the hydrochlorate of cocaine, and that the one may be substituted for the other in all cases where a local anæsthetic is required. This accords with the experience of Dr. Fauvel, the well-known laryngologist, who considers this possibilty of substitution an immense advantage in a pecuniary point of view, as the price of cocaine is still very high, being sold in this country at thirty francs per gramme, whereas the caffeine is sold at two francs for the same quantity. Dr. Fauvel employs the caffeine, to the almost entire exclusion of cocaine, in all pharyngo-laryngeal affections, in a 2 per cent. solution, a few drops of which are added to a little water, and the affected parts painted with the mixture, which affords almost instantaneous relief. The painting must of course be repeated several times during the day, in order to keep up the analgetic properties of the drug. Dr. Laborde, however, does not consider caffeine a proper substitute for cocaine, as he had tried some experiments with the former alkaloid as well as with theine, and could not obtain the least anæsthesia of the cornea, even with a concentrated solution. Prof. Panas observed lately in his practice that a solution of cocaine instilled into the eye dilated the pupil as much as atropine, which was contrary to what he had noticed before. In seeking the cause of this difference of action, Prof. Panas discovered that the cocaine he then employed was not like that he was in the habit of using. On further inquiry, he found that the substance in question was *the product* of the second maceration of coca leaves, and contained a large proportion of hygrine, which possesses mydriatic properties as marked as those of atropine, without the anæsthetic property of cocaine; hence the number of failures with some samples of the latter drug.

CRITICAL CONDITION OF VICTOR HUGO.

Victor Hugo is lying most dangerously ill from congestion of the lungs complicated with an affection of the heart. He has been ailing more or less for the last three or four months, and it was on Thursday last that he was seized with the attack under which he is now labouring. On that day, he gave a dinner to his friends in honour of M. de Lesseps, and appeared in good spirits. It was, however, observed that he was rather paler than usual. The reception was over by eleven o'clock, and in the course of the night Victor Hugo felt himself seriously indisposed. Dr. Emile Allix, the usual medical attendant of the illustrious poet, was immediately sent for, and he noticed that the movements of the heart were very slow and feeble. With the use of stimulants the patient seemed to revive, and during the following day nothing particular occurred to cause alarm, but in the evening his condition became aggravated, and early next day Professor Germain Sée was called in, who recognised symptoms of pulmonary congestion and heart disease. The patient who, from his advanced age, is evidently in a very serious condition, is yet in full possession of his mental faculties. He has a great aversion to medicine, and refuses to take it when offered to him. The bulletin of this morning, signed by Drs. Vulpian, Germain Sée, and Emile Allix, announces that though the prostration of the patient is very great, there yet seems to be a slight tendency to amelioration.

Paris, May 20th.

MEDICAL NOTES IN PARLIAMENT.

Lunacy Acts Amendment Bill.

ON the 19th inst. the House of Lords went into committee on this Bill, when a series of amendments, proposed by the Lord Chancellor, of which notice had been given and which occupied thirteen pages, were inserted, and the Bill was ordered to be printed.

The English Registration Bill.

During the consideration in committee of this Bill, Lord Balfour of Burleigh moved the rejection of the clause which provides that the receipt of parochial medical relief shall not disqualify a voter; and after some discussion, in which the Lord Chancellor, the Marquis of Salisbury, the Earl of Belmore, Lord Fitzgerald, the Duke of Richmond, and the Earl of Kimberley took part, the clause was struck out on a division by 72 against 47.

The House of Commons on the 20th inst., after a somewhat lengthy discussion, agreed to the Lords' amendment by 107 to 66 votes.

Irish District Lunatic Asylums.

On the 15th inst., in reply to Mr. Corbet—who asked the Irish Secretary whether it was true, as recorded in the last Parliamentary report, that 318 of the persons appointed as governors of district asylums never attended a board meeting during the year 1883; whether these persons consisted chiefly of noblemen, deputy lieutenants, and justices of the peace, and were appointed by the Lord-Lieutenant under statute; whether the duties devolving on governors included sanctioning the admission of patients, taking contracts, and general fiscal control; and whether some system could not be devised under which so large a number of the governors would not absent themselves from their duties—Mr. Campbell-Bannerman said that, assuming the figures to be correct, it must be borne in mind that these asylum boards are very large, and that the object of having them so large is to secure, not that all the members should always attend, but that there shall always be a quorum for the transaction of the necessary business. He was not aware of any complaints of failure in this respect, and it is always in the power of the Lord-Lieutenant to strengthen any board when that is deemed necessary.

Small-pox in Manchester.

In reply to a question by Mr. Leahy, relative to the removal of the 5th Dragoon Guards from Manchester to Newbridge, the Marquis of Hartington stated that the strictest orders have been given that no civilians shall be permitted to accompany the regiment to Ireland in any capacity whatever, unless they are medically examined and certified by the medical officer to be free from small-pox or the danger of conveying it to others.

Assistant Paymasters and Surgeons.

On the 21st inst. Mr. Borlase asked the Secretary to the Admiralty if it was a fact that the assistant paymaster in H.M.S. *Devastation*, who had nearly sixteen years' seniority in that rank, was thirty-seven years of age, and had been twenty years in Her Majesty's Service, was still junior in relative rank to the surgeon of that ship, who had been only fifteen months in the service, and was about twenty-three years of age; and, if so, if it was the intention of the Admiralty to allow so great an anomaly to continue. Sir T. Brassey said the figures given by the hon. member were approximately correct. The age of the surgeon on the *Devastation* was some three years more than stated in the question. No material change was contemplated with reference to relative rank of paymasters and surgeons. It was anticipated that the promotion of assistant paymasters would become more rapid in the future; but medical officers who could only enter the service on the completion of a long and expensive course of professional training would always be in a position to claim superior relative rank.

Obituary.

WILLIAM WATKINSON MOXHAY, M.R.C.S., L.S.A.

READING has just lost another prominent member of the profession by the death of Mr. Moxhay, which took place on Wednesday, the 20th inst., at the comparatively early age of sixty-three. He was educated at Guy's, and was formerly assistant accoucheur at St. Thomas's. His chest at this time was supposed to be somewhat delicate, and he went to sea in the Royal Navy for several years, which entirely invigorated him. He was then made house-surgeon at the Royal Berkshire Hospital, and was subsequently elected surgeon to the hospital, which position he held up to the time of his death. He was an expert operator and a thoroughly sound practitioner. His funeral took place on Saturday, just one month from the time of the funeral of his late colleague, Dr. Wells. Many thousand persons were present, all his colleagues, and most of the local medical men, as well as the governors, officials, and nurses of the hospital, among whom he was much beloved. He was a prominent Freemason, and the members of his lodge attended in large numbers at his funeral, as well as those of the lodge of Oddfellows to which he was surgeon.

SETH B. WATSON, M.D.

WE regret to announce the death of Dr. Watson, honorary physician to the Radcliffe Infirmary, Oxford, in his seventy-fifth year, which took place on the 15th instant. His horse having stumbled, he was thrown to the ground, and died immediately. Educated at St. John's College, Oxford, and afterwards at King's College, London, and St. George's Hospital, Dr. Watson early became physician to the Radcliffe Infirmary. Independent in thought, he from the first opposed the then universal practice of bleeding. Naturally diffident and retiring, he did not publish his opinions. Alone in his views at that time, he naturally met with much opposition, and it was even suggested that he ought to resign his appointment. He, however, lived to see his views generally accepted. Later in life Dr. Watson published a work on "The Cholera at Malta." In this he was indebted for much local information to his friend, Sir John Stoddart, formerly judge at that place. Later still he edited and published Coleridge's "Theory of Life," which met with a rapid sale. Coleridge lived with Mr. Gillman at Highgate, and after Mr. Gillman's death a manuscript was found which Dr. Watson at once identified as the work of Coleridge. It will shortly be republished, with other works of Coleridge, by Messrs. George Bell and Sons. An elegant and accomplished classical scholar, with refined and sensitive feelings, Dr. Watson will be long remembered by those who knew him best as a person of no ordinary intellectual power and a sincere friend.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following candidates passed the Primary Examination in Anatomy and Physiology for the diploma of Member of the College at a meeting of the Board of Examiners on the 11th inst.:—

ANATOMY AND PHYSIOLOGY.—G. Alexander Sutherland, Edward H. Ezard, Alexander Primroses, John McLachlan, F. Miller Johnson, F. Wyville Thomson, Charles W. Hayward, Robert Jardine, Edward W. W. Carlier, Percy Wardle, and Alfred Mann, Edinburgh; Sydney M. Whitaker, Walter Thompson, William Summerskill and George Handcock, Leeds; C. Louis Williams and Robert A. Beaver, Liverpool; Basil R. T. Trevelyan, Bristol; Edward C. Masser, Birmingham; Charles J. Whitley, Guy's; N. C. Ridley, St. Mary's.

ANATOMY ONLY.—Albert W. Gray, Birmingham; James B. Jamerson and Edgar N. Darwent, Edinburgh; Henry Hamilton, Bristol.

PHYSIOLOGY ONLY.—Richard F. Shepherd and Alfred Borradaile, Edinburgh; Benjamin P. Johnson, Edmund Copper and W. Courter Costine, Liverpool; Lock Macdona, Manchester and Liverpool; John Fullard, S. Vere Duncan, King's College.

(Candidates referred for three months, 3.)

Passed on the 12th inst.:—

ANATOMY AND PHYSIOLOGY.—Edward Molyneux, Liverpool; W. Aldren Turner, M. L. Trechmann, Arthur E. Barlow, J. Francis Haswell, Charles P. Kennard, Frank A. Juckes, Johnston H. Acheson, Ralph H. Maddox, F. R. B. Hinde, J. Hill Conyers, James Musgrave, H. Lloydd Roberts, J. C. Dunlop, Ernest C. S. Daniel, and W. Stacy Colman, Edinburgh; Charles P. Tanner and H. N. Cappe, University College; George A. Heberden, St. George's; H. T. Dudley Ryder, King's College; Adolph Bronner, Heidelberg; F. R. W. Brown, London; E. Marsh [illegible] St. Thomas's.

ANATOMY ONLY.—D. [illegible] lement Gomez, University College [illegible] J. E. Wright, King's College; E. [illegible] Walcot, Edinburgh; Sidney H. Badcock, St. Bartholomew's.

(Candidates referred for three months, 2; six months, 2.)

Passed on the 13th inst.:—

ANATOMY AND PHYSIOLOGY.—E. L. Cheatle, Francis H. Roberts, H. N. Baron, and Henry Smith, King's College; A. D. P. Hodges, London; Albert M. Sully, F. Barber Wells, Harold Dane, Charles T. Holland, Samuel Bullivant, and John E. Dyer, University College; James R. Anderson and E. L. Puddicombe, St. George's; Thomas Robinson and John Arthur Francis, St. Bartholomew's; W. L. Symes and W. H. Dolamore, St. Mary's; W. M. Helsham, St. Thomas's; A. G. W. Bowen, Guy's.

ANATOMY ONLY.—Henry J. Tizard, St. George's; Alfred W. Waller, St. Thomas's; Alfred R. Sieveking, St. Mary's.

PHYSIOLOGY ONLY.—A. H. Vassie, Edinburgh; C. H. Clayton, University College; H. A. Bray, King's College; C. Montague Leakey and Edmund D. Chalót, London.

(Candidates referred for three months, 4; six months, 5.)

Passed on the 14th inst.:—

ANATOMY AND PHYSIOLOGY.—Francis H. Cooke, H. Cleveland Smith, H. F. C. Marvin, and Richard L. Roberts, University College; Arnold Caddy, C. Mackinnon Clark, St. George's Hospital; J. A. Pope Lockett, London; Arthur J. De Butts, A. Stephen Hanson, and Robert W. Senior, King's College.

Anatomy only.—Walter Watkins, St. Bartholomew's; F. Maurice House, Pieter C. De Wet, and H. Bowman Shepperd, St. Thomas's; J. Percival Westrup, King's College.

Physiology only.—J. Valek Albert, St. George's; Philip J. Le Riche, University College; George H. Metcalf, Guy's; Frederick C. Auger, Charing-cross,

(Candidates referred for three months, 3; six months, 4.)

Passed on the 18th inst:—

Anatomy and Physiology.—Thomas F. Parry, Liverpool; Charles F. Marshall and G. E. Fryer, Manchester; G. Pirrie Boddie, Edinburgh; Ernest W. Evans, St. Bartholomew's; Reginald W. Bishop, C. Ramsden Salisbury, and J. V. B. Twamley, Leeds; J. Patrick Howe, Dublin; G. E. Roberts, University College; C. E. Matthews, Cambridge; J. Frederick Twist, Birmingham.

Anatomy only.—William C. Burt, R. Wynne Rouw, G. W. A. Mitchell, and F. Stanley Wood, Guy's; George S. Ridgley, E. A. T. Harris, and Edward Carnall, St. Bartholomew's; A. Piercefield Walters, University College; James Magauran, Dublin; Walter Mitchell, Sheffield; John W. Smith, Aberdeen; W. James Watkins, Bristol; Rhodes Hebblethwaite, Leeds; J. Edmund Syme, Edinburgh.

Physiology only.—Edwin Lambert, Leeds; Sidney E. Rossiter, St. Bartholomew's.

(Candidates referred for three months, 5; six months, 1.)

Passed on the 19th inst.:—

Anatomy and Physiology.—A. Evelyn O'Leary, Bristol; W. H. F. Noble and C. Alexander Ducket, University College; Alfred E. Nuttall, Alexander Harris, and Frederick O'Kinealy, St. Bartholomew's; Harry Corner and Digby F. B. Cotes, London; Harold A. Kidd, St. Mary's; Harford N. Edwards, Guy's; Sorabji M. Kaka, Bombay; H. Danvers, St. Thomas's; W. J. B. Carter, St. George's.

Anatomy only.—C. D. H. Rygate and E. E. P. Tindall, Guy's; Charles T. Bowen, St. Bartholomew's; J. T. R. Miller, St. Thomas's.

Physiology only.—H. F. Devis, Bristol; J. D. H. Smyth, St. Mary's; James Bamfylde, Guy's.

Passed on the 20th inst.:—

Anatomy and Physiology.—J. Milles Thorne, R. Grieve Hicks, Percy W. Streatfield, and James W. Smith, Guy's Hospital; William Halley and Reymond E. Fasnacht, Charing-cross; P. Tranto, Carpenter, St. Mary's; E. Ashcroft Tudman, University College; E. S. Farquharson, London.

Anatomy only.—C. R. H. Buckley, C. Glover Thorp, and John P. Pendlebury, Guy's; Frentz W. Guiselin, W. G. R. Farquharson, St. Mary's; W. H. Hand, St. George's; Frederic W. Barton, University College.

Physiology only.—Henry E. Belcher and H. H. Browne, University College; W. Fellowes Fisher and F. Stephen Reed, London; T. Hubbar Leggett and Ernest Loveday, St. Bartholomew's; Robert Stuart, St. George's; Frank Osborne, St. Thomas's; David T. Jones and Courtenay J. Fuller, Guy's; J. Ellison Finnie, Liverpool.

(Candidates referred for three months, 3; six months, 2.)

At the last Anatomical and Physiological Examination for the diploma of Membership of the College, 139 candidates presented themselves, 56 of whom, having failed to acquit themselves to the satisfaction of the Board of Examiners, were referred to their studies for three and some to six months; 21 were referred in both Anatomy and Physiology, 14 in Anatomy only, and 21 in Physiology.

College Lectures.—The annual course of lectures will be resumed on Monday, June 1st., at 4 p.m., by Professor Edward Lund, F.R.C.S.E., who will deliver three lectures on "Some of the Injuries and Diseases of the Head and Neck, Genito-Urinary Organs, and Rectum." Professor John Wood, F.R.S., will deliver three lectures on "Hernia and its Radical Cure," commencing on Monday, June 8th. Mr. Edward Albert Schäfer, M.R.C.S., F.R.S., will deliver three lectures on "Secretion," commencing on Monday, June 15th. Professor Charles Stewart, M.R.C.S. (Erasmus Wilson Lecturer), will conclude the course by delivering three lectures on "Inflammation," commencing on Monday, June 22nd.

The Library of the College is closed to-day (Friday), and will also be closed on Friday the 29th inst., for the purposes of the Fellowship Examinations.

University of Cambridge.—The following have been examined and approved at Cambridge University for the degree of Bachelor of Surgery:—

Andrews, John's.
Haig, Trinity.
Lynch, Caius.
Nichol, Caius.

Royal University of Ireland. — The undermentioned have passed the examination for the degree of Master in Surgery:—

John Barron, W. J. Cowden, G. B. Crawford, M. H. Curtin, T. W. Dwyer, R. E. Foott, W. R. Hawkins, J. McAleer, Michael McCarthy, W. B. R. McWha, G. F. H. Marks, John Meenan, John Moore, James Musgrave, James P. O'Byrne, Robert Petticrew, E. L. Pooler, John Ryan, William Sexton, Norman Smyth, Robert Thomson, F. J. Tresilian, J. J. Walsh, M. J. Whitty.

The following have obtained the degree of Master in Obstetrics:—

Maurice Connery, Alexander Corry, M. H. Hannigan, Daniel Hennessy, Michael McCarthy, Morgan McSwiney, W. B. McWha, Robert Petticrew, John Ryan, William Sexton, F. J. Tresilian.

Apothecaries' Hall. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 7th *inst.*:—

Tyndall, Francis, M.R.C.S., Liverpool School of Medicine.

Passed on the 14th:—

Dearden, Wm. Francis, M.R.C.S., Manchester School of Medicine.
Creighton, Edward, St. Thomas's Hospital.
Dobson, Leonard Charles Talbot, St. Bartholomew's Hospital.
Hall, Thomas Godfrey, Leeds School of Medicine.

The Princess of Wales has consented to act as President of the Ladies' Sanitary Association in Dublin.

The annual dinner in connexion with the Pharmaceutical Society of Great Britain was held on the 19th inst.

On Wednesday night an outbreak of fire took place in St. Mary's Hospital, Cambridge-place, but was speedily extinguished.

German Hospital.—The Queen has presented this Hospital with a donation of £100 as an addition to the collection made at the anniversary festival held on the 6th inst.

At the sixth general meeting this session of the Hospitals Association on the 20th inst., Miss Louisa Twining read a paper entitled "Thoughts on the Diet of Nurses in Hospitals and Infirmaries."

At the adjourned inquest on the 15th inst. touching the death of Dr. Charles Alworthy, of Toft Hill, near Darlington, which occurred on the 23rd ult., the jury returned a verdict of death from natural causes.

Charing-cross Hospital.—The Duke of Edinburgh presided on Wednesday at the triennial festival, held at Willis's Rooms, in aid of the funds of this hospital, when subscriptions to the amount of nearly £7000 were announced as the result of the meeting.

On the 16th inst. the Archbishop of Canterbury opened the new infirmary of the Croydon Union. The designs are for six pavilions, with 643 beds; but up to the present only four pavilions, with 435 beds, have been erected. The cost of the building is £101,000.

The Levée.—At the Levée held by the Prince of Wales on behalf of the Queen at St. James's Palace on the 11th inst., Surgeon E. West Symes, M.D., of the 2nd West York (Prince of Wales's Own) Yeomanry Cavalry, was presented by Lieutenant-Colonel Edwards.

Glasgow Water-supply.—A Bill has passed a committee of the House of Lords giving power to raise the level of Loch Katrine and Loch Arklet, with a view of providing additional and improved water-supply to the Glasgow district, at a cost of over a million sterling.

On Wednesday last, in the presence of a goodly company of ladies and gentlemen, Sir Spencer Wells unveiled a medallion of the late Mr. Peter Squire in the Examiners' room of the Pharmaceutical Society, Bloomsbury-square, of which Society Mr. Squire was one of the founders.

University of Brussels.—At the May examinations for the degree of M.D., eleven English candidates presented themselves, of whom the following five were successful:—William Budd, Herbert Fenton (distinction in Anatomy), Herbert Spencer (distinction in Medicine and Surgery), G. Walter Steeves, and Charles R. Walker.

A conference was held at Canterbury on the 15th inst. between the various sanitary authorities of the district, to consider the best means to be adopted for dealing with an outbreak of cholera or other epidemic disease during the approaching summer. There being no infectious hospital in the district, it was resolved that hospital tents should be hired, and immediately on a case of disease being reported, isolation should be resorted to.

Judge Abdy on Medical Charges.—In an action brought by a medical man in the Colchester County Court the plaintiff's counsel said the amount claimed was £20 2*s*. Defendant had paid £8 8*s*. into court since the bill was delivered. The account began in 1879, and extended until 1882. The counsel for the defence said his client felt that he was being very harshly used by the plaintiff in consequence of the manner in which the action had been brought. A number of very unnecessary visits had been paid. His honour (Judge Abdy) said he was astonished at the moderation of the charges made by country medical ractitioners. He did not know any body of men who orked harder. The jury found for the plaintiff for the full mount claimed.

St. Bartholomew's Hospital, Rochester.—The hole of the brickwork on the north side of the hospital is ow in course of repair, and stone windowsills are to be rovided. The general sanitary condition of the building as been engaging the attention of the Board of Trustees for ame time past; and it has now been decided to carry out ome work in connexion with the present sanitary arrangenents at considerable cost.

King's College Hospital.—The festival dinner in onnexion with this institution was held on the 16th inst., he Duke of Cambridge, President of the hospital, in the hair. The number of in-patients received during 1884 was 193, and of out-patients treated 15,103. The deficit in 831 amounted to £8689; in 1882 it was reduced to £2576; n 1883 it was £2889; and last year it again rose to the arge sum of £6668. During the evening subscriptions and onations amounting to £2229 were announced.

Training School and Home for Nurses.—An xamination, written and *vivâ voce*, was held at the St. Iarylebone New Infirmary, Notting-hill, on the 13th inst. Lectures and chemical teaching had been given by Mr. John R. Lunn, medical superintendent, Mr. Larder, assistant medical officer, and Mr. Clifford, dispenser, on Chemistry and Hygeia, and by Miss Wyld, lady superintendent of the Nurses' Home. The School for the Training of Nurses for the Sick Poor was opened on the 22nd of July, 1884, and is in connexion with the "Nightingale Fund."

Fifeshire Medical Association. — The spring meeting of this Association was held at Dunfermline on the 1st inst. Dr. Dow, the president, read a paper on the Management of Habitual Drunkards, and Dr. Naysmith one on Practical Sanitation. Dr. Brakenridge exhibited a case of Elephantiasis Græcorum. A proposal by Dr. Moir to have a course of health lectures given in the principal towns in Fifeshire was heartily adopted. An able paper was also read by Dr. Turnbull in favour of the Scottish legal system of sending lunatics to asylums.

At the third international conference of the Societies of the Red Cross, held last year in Geneva, the Empress of Germany offered 5000 francs and a gold medal as a prize for the best model of a soldiers' barrack and field hospital. The barrack must be large enough to contain twelve beds, easy of transportation, made with interchangeable parts, and capable of being taken down and reconstructed. The designs are to be sent to Antwerp by September 1st, 1885, when a committee will decide on their respective merits.

The Hunterian Museum.—A special meeting of the trustees of the Hunterian Collection was held at the Royal College of Surgeons on the 15th inst. to elect four trustees in the vacancies occasioned by the decease of Dr. Allen Thomson, of the Duke of Buccleuch, and Mr. Cæsar H. Hawkins, and by the resignation of Mr. William Hunter Baillie, when the following gentlemen were respectively elected to fill such vacancies:— Professor H. H. Flower, LL.D., F.R.S., the late Conservator of the Museum; Lord Wolsingham; Sir James Paget, Bart., LL.D., F.R.S., late President of the College; and Mr. Wm. Hunter Baillie, jun.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

Barst, C. T. U., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of Health to the Willington-on-Tyne District, vice C. W. C. Fletcher, M.R.C.S., L.R.C.P., resigned.

Childe, C. P., M.R.C.S., has been appointed Assistant House-Accoucheur to King's College Hospital.

Crabb, James, M.D., C.M.Ed., has been appointed Medical Officer for the Upper Holloway West District of the Islington Union, vice Cowen.

Davies, Howard, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse, Pontypridd Union, vice Hopkins, deceased.

East, C. H., L.S.A.Lond., has been appointed Physician's Assistant to King's College Hospital.

Easton, Thomas, M.A., M.B.Ed., has been appointed Medical Officer to the Wigtownshire Combination Poorhouse; and Medical Officer to the Parochial Board of Kirkcolm, and to the Corsewall Lighthouse.

Gray, J. P., M.R.C.S., L.S.A.Lond., has been appointed Ophthalmic Clinical Assistant to King's College Hospital.

Griffin, James, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Cropredy District of the Banbury Union, vice Thompson, resigned.

Harries, J. F., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

Hughes, E. A., M.R.C.S., L.R.C.P., has been appointed Physician-Accoucheur's Assistant to King's College Hospital.

Jeffree, F., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

Jenkins, Jenkin, L.F.P.S.Glas., has been appointed Medical Officer for the Pontypridd District of the Pontypridd Union, vice Hopkins, deceased.

Kealy, Joseph Patrick, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer to the Gulgong Hospital, New South Wales.

Kilham, Charles Speight, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer to the Workhouse, Sheffield Union.

Lewis, P. G., L.S.A.Lond., has been appointed Assistant House-Physician to King's College Hospital.

McDougall, Aymer Robert, M.B., C.M.Ed., M.R.C.S., has been appointed Honorary Surgeon to the Chesterfield and North Derbyshire Hospital, vice Foulds, deceased.

Paddison, Edmund Howard, M.D.Lond., M.R.C.S., has been appointed Assistant Medical Officer to the City of London Lunatic Asylum, Stone, vice Mercier, resigned.

Priestley, R. C., M.R.C.S., has been appointed House-Surgeon to King's College Hospital.

Sellick, J. Henderson, M.R.C.S., has been appointed House-Surgeon to the North-West London Hospital, Kentish-town-road.

Sutherland, John R., L.R.C.S.Ed., has been appointed Medical Officer for the Rainton District of the Houghton-le-Spring Union, vice Jackson.

Vachell, Herbert Redwood, M.D., M.R.C.S., L.S.A.Lond., has been appointed Out-patient Medical Officer to the Glamorganshire and Monmouthshire Infirmary, Cardiff, vice Thomas Wallace, M.D., appointed Surgeon.

Violette, William Bradley, M.B., C.M.Glas., has been appointed Government Medical Officer and Vaccinator for the District of the Lower Richmond River, New South Wales.

Births, Marriages, and Deaths.

BIRTHS.

Bothamley.—On the 13th inst., at Cadogan-terrace, Victoria-park, the wife of W. P. Bothamley, M.R.C.S., of a son.

Drew.—On the 20th inst., at Saville House, Buntingford, Hertfordshire, the wife of J. Bowerman Drew, F.R.C.P.S. & L.M., of a daughter.

Flint.—On the 14th inst., at Westgate Lodge, Westgate-on-Sea, the wife of Arthur Flint, M.D., of a daughter.

Holthouse.—On the 15th inst., at Reigate, the wife of Edwin Hermus Holthouse, F.R.C.S., of a son.

Joynt.—On the 25th ult., at Hanover-street, Kingston, Jamaica, the wife of Surgeon-Major H. W. Joynt, Army Medical Staff, of a daughter.

MARRIAGE.

Foley—Tweddle.—On the 14th inst., at St. Leonards, Streatham, Charles N. Foley, M.R.C.S., to Mary Elizabeth (May) Tweddle, daughter of the late Edward Tweddle, of Norwood, S.E.

DEATHS.

Allen.—On the 15th inst., at Ardleigh Lodge, Romford, very suddenly, William Edward Allen, F.R.C.S., Brigade-Surgeon, Bengal Army (retired), aged 50.

Barnes.—On the 13th inst., at 6, Portland-square, Carlisle, Dorothy, younger daughter of Henry Barnes, M.D., F.R.S.E., aged 1 year and 4 months.

Colebrooke.—On the 19th inst., at Brightlands, Southborough, Tunbridge Wells, Henry Colebrooke, M.D., aged 70.

Cree.—On the 18th inst., on board the steamship *Dorunda*, on his way home from Queensland, Percy Kinburn Cree, M.R.C.S. & L.S.A.Lond., Surgeon R.N., aged 29.

Graves.—On the 14th inst., at Canning-place, Kensington-gate, John Stewart Graves, Deputy Inspector-General of Army Hospitals, late Surgeon of the 4th Light Dragoons, and for many years Surgeon at the Tower of London.

Lee.—On the 12th inst., at Ashbourne, Derbyshire, John Lee, M.D., aged 81.

Moxhay.—On the 13th inst., at his residence, London-street, Reading, William Watkinson Moxhay, M.R.C.S., aged 63.

Oldman.—On the 16th inst., at Huntingdon, John Oldman, M.R.C.S., L.S.A.Lond., Surgeon-Major, 5th Battalion King's Royal Rifle Corps, the second son of the late Thomas Oldman, Esq., of Gainsborough, Lincolnshire, aged 48.

Packman.—On the 11th inst., at Anerley, John Daniel Vittoria Packman, late Surgeon, H.E.I.C.S., aged 71.

Priest.—On the 13th inst., at Waltham Abbey, Essex, Arthur Priest, M.R.C.S., L.R.C.P.Ed., aged 68.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(*Taken daily at 8.30 a.m. by Steward's Instruments.*)

THE LANCET OFFICE, May 21st, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 15	29·98	N.W.	50	45	99	62	43	...	Cloudy
„ 16	29·83	W.	53	47	103	61	45	...	Cloudy
„ 17	29·75	W.	51	47	95	57	44	·03	Cloudy
„ 18	29·89	N.W.	48	43	95	58	41	·15	Cloudy
„ 19	30·10	W.	50	45	85	57	43	·02	Hazy
„ 20	29·60	S.W.	50	47	...	...	47	·13	Raining
„ 21	29·39	W.	48	46	99	57	43	·16	Raining

Medical Diary for the ensuing Week.

Monday, May 25.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, May 26.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8 P.M. Dr. Spencer *Cobbold: Cases of Hæmaturia due to Bilharzia (Illustrated by* Specimens).—Dr. Angel Money: The Experimental Production of Chorea and other Results of Capillary Embolism.

Wednesday, May 27.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—*Operations, 2 P.M.; Saturday, 2 P.M.* Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens as usual. Discussion on Dr. More Madden's paper on Fibro-myomata.

Thursday, May 28.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. C. Meymott Tidy: Poisons.

Friday, May 29.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—9 P.M. Mr. J. J. Coleman and Professor J. G. McKendrick: Mechanical Production of Cold, and Effects of Cold on Microphytes.

Saturday, May 30.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Rev. C. Taylor: "The Teaching of the Twelve Apostles," an Ancient Document, with Illustrations from the Talmud.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

"DRINKING PARAFFIN OIL."

To the Editor of THE LANCET.

SIR,—In THE LANCET of May 9th a case under the above heading is recorded by Mr. Willson. In January last I had to deal with a case where paraffin oil was accidentally swallowed, of which the following is a brief account.

J. H——, aged forty-three, stableman, took with him as usual to his work a tin flask containing tea. There was a similar flask in the stable, which contained about half a pint of paraffin oil. The two flasks having been carelessly placed near each other, he, feeling thirsty, picked up the wrong one, and swallowed nearly the whole of its contents. I saw him in the surgery about an hour afterwards; he was pale, and his face wore an anxious expression, more the result of mental distress than of actual suffering. There was a strong odour of paraffin oil in his breath. He complained of his throat feeling hot and dry, and of a sensation of warmth in the epigastrium, but there was neither pain nor tenderness on pressure. There was no nausea. The pupils were normal. The pulse was full and rapid, chiefly, I think, the result of excitement. An emetic of twenty grains of sulphate of zinc was given, and the vomiting encouraged by copious draughts of warm water. By these means the stomach was thoroughly emptied. The vomited matters consisted of water, a small quantity of viscid mucus, a little partially digested food, and about eight ounces of paraffin oil. For after-treatment I ordered demulcent drinks and a dose of castor oil. He went to work next morning, feeling none the worse for his experience of the day before, not even the slightest indication of gastric irritation having shown itself, although the paraffin oil must have been in contact with the mucous membrane of the stomach for at least an hour. There was very little food in the vomited matter, so that the mucous coat had not the protection from irritation which the abundant presence of food would have afforded.

I am, Sir, yours faithfully,

T. C. M'CULLOCH.

Hanwell, May 11th, 1885.

Mr. U. M. Snyder.—1. Analogous cases are often met with, but are not easy to explain.—2. Bichat's work, of which the first edition was published in 1805, was translated into English by F. Gold, M.R.C.S.; but it has long been out of print. An American edition of this translation was published in Boston (Richardson and Lord) in 1827 (*vide* Index Catalogue of the Surgeon-General's Library, Washington).

W. D. D. Parks, B.A., L.K.Q.C.P.—Our correspondent's letter is written with almost invisible ink and on very thin paper; but, so far as we can make it out, we agree with him in very lightly esteeming the American degree of which he speaks.

Mr. J. Morth is referred to a general notice at the head of this column.

DR. TIBBITS' MEMORIAL FUND.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to acknowledge through THE LANCET, with many thanks, the *following contributions* received towards the fund being raised for the widow and nine children of the late Dr. E. T. Tibbits, Physician to the Bradford Infirmary, whose life was so suddenly brought to its close by an attack of acute pneumonia on April 11th last:—

Dr. Frederick Orton ...	£10	0	0	Dr. Saul	£2	2	0
Dr. G. Oliver	5	5	0	Saml. Knaggs, Esq. ...	2	2	0
W. E. Rawstorne, Esq....	5	0	0	H. E. Taylor, Esq. ...	1	1	0
Francis Vacher, Esq. ...	5	0	0	A. Locker, Esq.	1	1	0
Mr. and Mrs. Vertue Edwards...	2	2	0	Dr. H. M. Tuckwell ...	1	1	0
				Dr. Wakley	2	2	0

Further contributions will be thankfully received by me, or by Mr. W. Maw, Secretary to the Bradford Infirmary.

I am, Sir, yours faithfully,

JOHN APPLEYARD, F.R.C.S., M.B.Lond.

1, Clifton-villas, Manningham, Bradford, Yorks, May 19th, 1885.

ORTHO-PHENOSULPHONIC ACID.

'. VIGIER, in a French pharmaceutical journal, states that of the three phenosulphonic acids the ortho-acid only has antiseptic and disinfecting properties in a marked degree. It is not so poisonous as phenol, as much as ten grammes having been taken in small doses in twenty-four hours without inconvenience. The subcutaneous injection of 2·8 grammes proved fatal to a dog. It appears to be a powerful antiseptic, although it is exceeded in this respect by its sodium salt.

Mr. E. A. Rodway.—The number is probably very small; but we have not the information at hand.

Microscope is perhaps a little hypercritical. Men are but children of a larger growth, and seem to like pictures. This is a pictorial age.

Mr. Walter Spencer will find a full description of the examinations for the degree in THE LANCET of April 18th last.

Mr. R. Thackray.—We cannot promise without seeing the paper.

A CASE OF INTUSSUSCEPTION.

To the Editor of THE LANCET.

SIR,—Cases of this kind are sufficiently rare to be worth recording, and the following may prove interesting enough to find a place in your columns.

On May 11th last a young married woman brought her baby, a girl aged six months, into my surgery at 6 P.M., saying that "she could not make the child out," as she had been constantly crying for two hours just after giving a sudden scream, and before this she was perfectly well. The child seemed pinched about the face, and was very restless; there was no feverishness or elevation of temperature, and I could not then decide what was the matter. I ordered her a little soothing medicine, and requested to know later on how she was. At 10 P.M. I was sent for, as the child seemed worse. On my arrival I was told that she had passed on two occasions a quantity of blood, which the mother showed me on her lap. I at once suspected that I had to deal with a case of intussusception, and ordered the child to have an enema, and prescribed two-drop doses of opium and five-drop doses of tincture of belladonna every two hours, with hot fomentations to the abdomen.—12th: The child was seen three times; she had passed a restless night, with fits of pain and straining, and vomiting of rather clear fluid; had not taken the breast. The enema had had no effect. There was now to be felt a decided hardness in the left iliac fossa, and the abdomen was somewhat swollen; no urine had been passed. The medicine had for the most part kept down. The enema was repeated twice. I passed my little finger up the rectum, but could detect nothing; this part of the bowel seemed quite free. Hot poultices were applied all day.—13th: The child was decidedly worse in every respect, and in the evening I managed to borrow after some difficulty a pair of bellows, and attaching to them a piece of indiarubber gas tubing, and to this the elastic nozzle of an enema syringe, I pumped up for about twenty seconds a quantity of air, and then left for the night, with orders to continue the medicine, and to wet the lips with milk and a little brandy.—14th: There was no relief to the child, and she seemed to be getting worse; so in the afternoon I had the bellows used again more vigorously and for a longer time, the nurse using them while I held the tube in the rectum. On my last visit at night there had been no relief, except that the child had passed some urine; but it seemed to me that the abdomen was slightly softer. I could, however, give but slight hopes of recovery.—15th: The father at an early hour left a note at my house, asking me to visit the child soon, as he thought there was a change for the better. On my arrival I found that an hour or two after I had left on the previous evening the bowels had been freely open, and again about five o'clock in the morning, and that the child had had a refreshing sleep, and had taken the breast freely. The abdomen was quite soft, with very little pain, and the child looked comparatively bright. I thought it best to continue the medicine, but at longer intervals.—16th: There was great improvement in all ways, the child feeding freely without sickness. The bowels not having acted, I ordered a small teaspoonful of syrup of senna to be given in the evening. This, however, was not required, as on my visit next morning (May 17th) I learned that the bowels had acted naturally twice, and found the little one being dressed, and laughing and screaming at its father, perfectly recovered.

I am, Sir, yours very truly,

Queen's-park, Harrow-road, May 18th, 1885. A. L. GRIFFITH.

Mr. Thos. Cantrell.—Our space is too fully occupied at present to allow us to entertain the proposition.

W. J. N.—A copy of the work is to be sent to every registered medical practitioner.

CEREBRAL SURGERY.

To the Editor of THE LANCET.

SIR,—At the discussion at the Medical and Chirurgical Society last week it was stated that one of the difficulties to be contended against in operations on the brain was the [illegible] this I would suggest pressure [illegible] orrhage. For sponge grafting. Three times I [illegible] as is used in [illegible], for stopping hæmorrhage from cerebral sinuses, and once for bleeding from brain tissue; in each case it acted most satisfactorily. After some hours the sponge may be removed, or it may be gradually clipped off with a pair of scissors until only a very thin layer remains.

I am, Sir, very truly yours,

Birmingham, May 20th, 1885. GILBERT BARLING, F.R.C.S.

MR. BARNARDO'S HOMES.

THERE are now twenty-six different institutions under the direction of Mr. Barnardo, F.R.C.S.Ed. Of these, the Ragged Schools were founded in 1866; the Boys' Home, Stepney, in 1869; the Children's Hospital in 1872; the Girls' Village Home in 1873; the Little Boys' Home, Jersey, in 1880, and the other branches subsequently. From 1866 to the present year 1829 boys and girls have actually been received. There are 602 girls and 754 boys still in the institutions, while 2490 other children have received education, in whole or part, during 1884. Thus, a total of 4319 children were benefited during the year. Three hundred and fifty children have emigrated during the year, 320 boys and girls going to Canada, 9 girls to South Africa, and 21 boys and girls to Australia. The donations for all purposes during the year amounted to £60,423, which is the highest amount ever reached, and an increase over the previous year of £4700. The disbursements exceeded the income so much that the bankers' account was actually overdrawn by £5469. An exceedingly useful work is being accomplished by Mr. Barnardo, and it is to be hoped that the support accorded to him in the future will enable him to materially extend his field of labour.

M. C. C.—Try forcible pressure on the ganglion by means of the thumbs. Subcutaneous incision of the wall of the ganglion is another method.

SMALL-POX AND CHICKEN-POX.

To the Editor of THE LANCET.

SIR,—I have seen recently several cases of chicken-pox in adults which have been sent to small-pox hospitals, probably partly owing to the disease not being looked for at this period of life. In distinguishing cases of chicken-pox from small-pox I have chiefly relied on three points:—1. The nature and duration of the general symptoms, which seem sometimes to begin with the eruption in chicken-pox, at other times to go on after the eruption has come fully out. They are also mild. 2. The rapidity with which the eruption has become vesicular. An aborting small-pox eruption may be distinguished from a scabbing chicken-pox eruption by its not showing evidence of previous vesication, unless it has absorbed at a pretty advanced stage, when the differentiation of the diseases is aided by other circumstances. 3. The distribution of the eruption. This in small-pox generally conforms to the rule of being most abundant on the face and head, next on the limbs, preferably the arms, and least on the trunk. Chicken-pox is less regular, but usually most spots are found on the back. I would suggest that medical practitioners not familiar with the two diseases should occasionally refresh their recollection of the symptoms, &c., by looking over Dr. Collie's articles in Quain's Dictionary of Medicine, which from their practical nature will, I am sure, benefit others as they have done myself.

I am, Sir, your obedient servant,

JAMES A. PHILIP.

Metropolitan Asylums Board River Ambulance Service, May 19th, 1885.

Z.—Of course, each case of illness has to be studied separately, and idiosyncrasy has to be kept in view.

MR. DANIEL MURRAY O'HARA.

To the Editor of THE LANCET.

SIR,—It would be invidious on the part of Mr. Daniel Murray O'Hara to endeavour to disprove the remarks in the paragraph in your columns of the 16th inst. It was my intention to have invited the attention of that gentleman to the reports circulated in the Liverpool papers concerning him, and to have called his attention to the fact that I had already communicated to the Branch Medical Council in Ireland some months ago the imposition that was being then practised on his, I venture to hope, unsullied name. Seeing, however, that you have unfortunately fallen into the error, I hasten to assure you that I thoroughly sifted the circumstances on the occasion to which I have referred. I think you will find that the person who has committed suicide is Owen Patrick O'Hare, who had been sentenced to penal servitude for some offence some years ago, and scratched off the Register in consequence. This man assumed the name of O'Hara, being very similar to his own, and, unfortunately for him, has been the victim of self-sacrifice. If Mr. Daniel Murray O'Hara, with whom I am unacquainted, has been relieved of a weight on his mind, so much the better, from whom no thanks are needed by

Your obedient servant,

May 18th, 1885. AN OLD CORRESPONDENT.

P.S.—I enclose my card.

Dr. Randurtz (Berlin).—The London Institution is the only one of the kind of which we have knowledge.

USE OF THE TRICYCLE IN PREGNANCY.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "A Member of the Cyclists' Touring Club," I would record my opinion that a pregnant woman may, with ordinary precautions, ride a tricycle to full term. Hitherto I have found it difficult to persuade them to take the exercise after the seventh month; but from feelings of delicacy only, not from inability.

I am, Sir, yours faithfully,

Leeds, May 18th, 1885. JNO. GEO. NEVITT.

enables me to show you her portrait and you to realise better the verbal description. I need only describe to you the history of the onset of this extremely interesting case and the distribution of the lesions; individually the lesions are the same in character as those we have already described, but the association of patches supervening on the diffuse disease is very interesting, and also the unilateral character of that condition. The concurrence of ordinary keloid is paralleled in a slight degree by the case of Mrs. L——. Now, I want you particularly to observe that we have two stages *in the development of this case: the first marking the* onset of the diffuse acute, the second of the chronic circumscribed, form. In the onset of the diffuse part of it we observe it was very sudden, without apparent cause and preceded by œdema. So far these features are not very exceptional, and we have seen them all illustrated in our last lecture,[2] but its distribution was hemiplegic, and did not involve the upper extremity, nor the face at that time, but only the left side of the trunk and the whole of the left leg. The very opposite of what usually occurs, the distribution being usually paraplegic, but involving the upper half of the body. The distribution in this case is that of a spinal hemiplegia in the upper dorsal region. Some time later the second stage set in. The history does not enable us to infer the exact period, although we know that it was within a year, but we only learn the distribution of the new phase three years after the onset of the disease when she came under Dr. Addison's care. This was the stage of the development of patches. They came on slowly as far as can be gathered, and with the exception of those on the face were to a great extent right-sided, no special distribution in a recognisable nerve area was to be made out, but the patches on the left side of the face point to the influence of the fifth nerve, which is a not uncommon distribution for morphœa, as we have already seen. So far as the patches are concerned, there is nothing very unusual either in their development, physical characters, or distribution; it is their association with the diffuse form which is the chief point of interest, and this is rendered still stronger by the following two cases, where the patches preceded the diffuse condition and in one spread from the patch till it involved a larger tract. The first of the two is Mr. Gaskoin's case, to which I have before alluded as remarkable in so many ways that it deserves to be recalled at least in a brief abstract. The patient was a woman aged thirty-five, and the onset of the disease was described with confidence by the patient to a mental shock during pregnancy, and there was no history of rheumatism, gout, or syphilis. The disease was first noticed in the form of two patches on the outer and upper part of the right thigh; the patches increased in number, amounting to about thirty, and were situated more on the anterior than on the posterior surface of the body, rather more on the right side than on the left, and not in corresponding situations, and more on the lower than on the upper limbs. They were depressed in the centre, pigmented in various tints, brown, red, purple, yellow, and yellowish-white, were to some extent anæsthetic, though some were painful and tender, and attended with excessive pruritus. About three years later, after going to the seaside in inclement weather, she returned with "pasty œdema" of the legs and trunk, and the colour returned to the skin very slowly after pressure. The œdema gradually disappeared in the course of the ensuing six months, and simultaneously the skin became sclerosed, spreading from the morphœa patches, which became diffused over a large surface, losing their concavity and defined outline. The patient emaciated, losing two stones in weight, and gradually the whole skin, except the head, became involved, and the patchy was converted into a diffused atrophic scleroderma. At a later period the face was also affected below the forehead, but not the buccal mucous membrane. For the many and other interesting details I must refer you to Mr. Gaskoin's description in the sixtieth volume of the Medical and Chirurgical Transactions.

Here is another somewhat similar case, related by Dr. Dyce Duckworth. A servant, aged sixteen, had some patches of morphœa on the left thigh; seven years later she had an attack of acute rheumatism, and the patches spread and got harder; six months later the left foot and leg got hard and stiff, followed by the right foot and leg, and both forearms and hands, which were sclerodactylous. The disease was symmetrical on the arms and below the knees; there was none above the edge of the patella on the right leg, but there was a streaky band of induration on the left leg, which connected the diffuse part of the disease with the enlarged original patches on the inner and back part of the thigh. In Mr. Gaskoin's case you observe again, after exposure to cold, induration spread from the patches and became general. This is distinctly stated, and is in opposition to the view Mr. Hutchinson takes that morphœa never spreads, but only increases in size by fresh patches forming near and coalescing. Dr. Duckworth also states that after an attack of acute rheumatism the patches spread and got harder, and later diffuse scleroderma developed symmetrically on the extremities.

These three cases, then, show us that the morphœa condition may precede or follow the diffuse form, which in this class of case is always in the shrunken condition; and it appears to me that patchy scleroderma is almost as nearly related to diffuse scleroderma as patchy eczema is to general eczema. But I would have you to understand that while I regard them both as the outcome of the same pathological process, and occurring probably in individuals of the same constitution, the exciting cause of the two forms may be very different in its nature. The pathology, diagnosis, and treatment are the same in this as in the other forms of scleroderma.

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[2] As the case has been repeatedly described and commented on, the relation of the case is omitted.

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D.LOND.

(Continued from page 884.)

No. II.—THE PHYSIOLOGICAL AND CLINICAL ASPECTS OF THE BILE SALTS IN THE URINE.

IN *hæmoglobinuria* the blood-corpuscles undergo rapid and wholesale solution, and the liberated hæmoglobin dialyses into the urine. Since I began to use the peptone test I have only examined the urine of one case of this interesting ailment—interesting specially from the pathological relationship which it suggests between a suddenly induced hepatic or portal disorder, flooding the blood with the central component of the bile, and the rapid hæmolysis. I am indebted to Dr. Tyson of Sheffield for sending me the sample to which I refer, and which enables me to demonstrate what I, and probably others, have long suspected—namely, the presence of a large quantity of bile salts in the urine of hæmoglobinuria. This is the specimen, a good example of the urine provided by this curious disease. The quantity at my disposal being very small, I dilute it to the specific gravity of 1008, and I obtain a deep blood-coloured solution. On dropping a citric acid test-paper into sixty minims of this diluted urine, a dense zone of precipitated proteid soon forms across the middle of the column, the portion of the urine below it remaining quite clear. Those of you who were present when I read my former paper will call to mind that I pointed out that when this zonular precipitation takes place in urine of normal reaction[1] the presence of bile salts *along* with albumen or a proteid may be inferred. This urine is a good example of the fact, for the precipitate is very copious, though the urine is diluted fourfold. In order to obtain a notion of the amount of the bile salts by the peptone test in urine containing blood or the elements of blood, it is necessary to boil it (being at the same time careful *not to* add acetic or any acid either before or after the boiling), when the hæmoglobin and albumen coagulate, as in this example, into brown masses, and then to filter; this done, the diluted urine before us produces the standard opacity when only four minims are added to sixty minims of the test solution, so that I take it the bile salts are *1500* per cent. in excess. Furthermore, the boiled and filtered urine produces a good reaction with Pettenkofer's test, as you observe.[2] By the side of the tube showing Pettenkofer's reaction, I place another showing the dense zone of precipitated peptone induced by the diluted urine on which the peptone test solution has been run. I can but refer to what the examination of one specimen of hæmoglobinuric urine suggests; whether or not *the same observations can* be made in other cases remains to be seen.

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[1] The specimen under examination is acid. When the urine is alkaline, the zonular precipitate from a citric test-paper dropped into it may arise from an alkaline modification of albumen, as well as from albumen along with bile salts.

[2] Inasmuch as there are no trustworthy means by which the results obtained by any new test for bile salts may be checked (otherwise, I suppose, there would not exist the need for a new test at all), one must fall back on broken reeds. The tests introduced by Casali (oxidising agents, barium peroxide, stannous or antimonious chloride, along with sulphuric acid)

An important observation was made by Dr. George Harley respecting the albumen of hæmoglobinuria, which now, in this sample at least, receives explanation if bile salts are present as well as albumen. This observer remarked that the albumen was readily dissolved by a slight excess of acid,[3] and that is so in the urine before us. The fact is indeed shown by the zone which appears on dropping into the diluted urine a citric test-paper, the excess of acid at the bottom of the tube preventing the appearance of the precipitate there. The following observation of Dr. Wickham Legg is also very important in connexion with the presence of bile salts in hæmoglobinuric urine; the urine of a gentleman who had an attack while under examination was immediately put under the microscope, when, says Dr. Legg, "there was no difficulty in recognising many red blood-corpuscles. The urine was set aside till the next day, when it was again examined. This time I could not discover a single corpuscle."[4] Other observers have likewise detected the same fact, and if you place under the microscope a drop of blood along with a solution of bile salts you will witness what in all probability takes place in hæmoglobinuria, either before the urine is voided (for there are cases in which not a blood-disc can be detected in the freshly discharged urine) or after its emission.

I have already referred to the effects of catching cold in increasing the normal discharge of urinary bile salts. Is the hæmoglobinuric patient, because of some curious susceptibility to chilling, an example of this fact on so large a scale that bile salts are let loose, as it were, from the portal organs into the systemic blood, so as to discharge the hæmoglobin from an immense number of the blood-discs? I have pointed out the association that appears to me to subsist between the increased urinary elimination of bile salts and ague, as well as the diseases of that organ of ever-varying capacities—the spleen; and I am inclined to view these observations as at least interesting, if not suggestive, when studied by the side of the symptoms and pathogeny of hæmoglobinuria.[5]

(*b*) *Scurvy.*—In the four cases examined there was a large excess. I show you the urines of two convalescent cases of scurvy which I lately saw at the Seamen's Hospital, Greenwich; they both contain over 200 per cent. increase of bile salts.

Capillary hæmorrhage is also a prominent feature of the cholæmia of jaundice, leucocythæmia, diseases of the liver and spleen, and of fevers—at the onset especially. The epistaxis of hepatic disease, and of cardiac disease inducing congestion of the liver and spleen, will doubtless occur to your minds as a probable example of a cholæmic hæmorrhage. May not cholæmia be sometimes a determining cause of cerebral hæmorrhage—as perhaps especially in those cases in which apoplexy follows an unusually hearty meal? In animals which succumb to the intravenous or subcutaneous injection of bile salts the blood is found imperfectly clotted. This defect in the coagulability of the blood of the cholæmic—a fact which has frequently been recorded post mortem—suggests an explanation of the liability to alarming and persistent hæmorrhages which these patients not unfrequently exhibit after some trifling operation, such as the extraction of a tooth; and furthermore, may it not be a factor in some cases of menorrhagia and flooding?

7. *Cardiac asthenia.*—The biliary salts greatly reduce the force of the heart's action, and the frequency also, if the patient is fever free, or there is no cause of reflex irritation present. The fact is sometimes well illustrated by the slow and feeble pulse of jaundice. But my observation leads me to view the depressed cardiac action of cholæmia as not only of pathogenic interest, but of some practical importance under special circumstances—such as the administration of anæsthetics. At any rate, this appears to be the teaching of a late well-attested experience. An anæmic patient, about twenty-five years of age, whose urine had contained during the preceding three months from 100 to 150 per cent. increase of bile salts, went to her dentist in Leeds, without consulting me as to the advisability of inhaling an anæsthetic: and the dentist wrote me as follows: "Leeds, April 14th, 1885.—I have just had Miss X——, a patient of yours, with me, to have a lower molar tooth and an upper bicuspid root removed under nitrous oxide gas. I have administered it to her before, with the usual results. To-day all went well until I was just on the point of operating, when the breathing suddenly stopped and she collapsed. By a prompt use of the ordinary means of restoration she recovered, and after half an hour's rest did not appear anything much the worse, except that she continued to feel faint." It is surely worth while to keep such a fact as this in mind. In this case there were no signs of recognisable organic disease of the heart or other organs.

II. *The urinary elimination of bile salts is insufficient.*—Hitherto I have spoke of an excess of bile salts in the urine: I now come to consider the possible, if not probable, condition implying retention of these elements in the blood from imperfect evacuation of them by the excretory channels—kidneys, bowels, and skin. To decide this question demands a much larger experience than mine, and the accumulation of a multitude of carefully recorded facts, such as are not at present at my command. Hence every position that I advance I look upon as merely suggesting either a standpoint or a point of departure for further observation. I would divide the cases into two classes—namely, those in which the bile salts are present in great excess in the blood and the elimination of them by the kidneys is checked or rendered defective; and those in which the production of them is not excessive, but the renal discharge is subnormal. In all there must be a persistent and increasing retention of these excrementitious matters in the blood; perhaps only now and then relieved by the vicarious efforts of the bowels or skin, or by an occasional spurt, as it were, of the kidneys.

The production is increased but the elimination is inefficient.—When the systemic blood is greatly surcharged with bile salts—as in fever, jaundice, and certain forms of anæmia,—the patient, it would seem, is as a rule safe from acute poisoning so long as the kidneys discharge them with freedom. It is true he suffers all the while from the textural degenerations induced by the presence of them in excess in the blood; but while the charge of them is kept down below a certain dose, as it were, by efficient elimination, he runs no risk of imminent danger. It is otherwise when the kidneys and the *other emunctories fail to bale out the pernicious material*; for then it accumulates and effects further destruction of the cellular elements, and may even reach that percentage proportion which experiment has shown will induce convulsions and coma—a catastrophe which may, however, be averted for a time by a vicarious evacuation from the bowels or the skin, or perhaps by blood-letting. In high fever, especially at the onset in children, *this is by no means an uncommon event*;[6] and it is possible that now and then a fever patient has been sacrificed by the injudicious checking of a critical or vicarious evacuation. It is likewise occasionally met with in jaundice; when the patient unaccountably becomes apparently uræmic, or at any rate he is seized with convulsions and dies comatose. It is, therefore, of some practical importance, whenever there is a large proportion of bile salts in the blood—as, for example, in fever and jaundice—to see that the renal elimination of these noxious constituents is sufficiently free; and when a decided falling off takes place, while the fever is high or the jaundice is unabated, the observer should be ready to assist evacuation by other channels, and should be on his guard not to check a salutary discharge.

In chronic cholæmia my experience inclines me to think

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have proved worthless in my hands for urinary observation; and the evidence of Pettenkofer can only be taken for what it is worth, for it is easy to prove that it reacts with albumen. But my observation on the reactions provided by albumen and by bile salts with Pettenkofer's test has led me to recognise a difference, the purple zone of albumen appearing at once either at or more generally just above the line of contact of the urine with the sulphuric acid, and freely diffusing itself upwards into the urine, while the colour reaction with bile salts requires time, is rarely immediate, and appears in the upper layer of the sulphuric acid, there often appearing a clear space between the zone and the urine. A point of great practical importance in using Pettenkofer's test is to prevent charring by inserting the tube at once into cold water after running down the sulphuric acid.

[3] Med.-Chir. Trans., vol. xlviii., p. 170.

[4] On Paroxysmal Hæmoglobinuria, St. Barth. Hosp. Rep., 1874, p. 77.

[5] I am inclined to think that hæmoglobin is present in the cold infusion of the splenic pulp. The elasticity and contractility of the envelope of the spleen, its amenability to reflex contraction, and its capacity of dilating to a large size, are, I think, important physiological facts to be duly weighed in our reasonings about hæmoglobinuria. (See Addendum.)

[6] The reader will bear in mind that in children under six years of age the liver weighs more in proportion to the body weight than obtains in after years.

that a check to the renal elimination of the bile salts may lead to retinal or other hæmorrhages, or to some similar results of the toxæmia. For example, an anæmic girl who for some months had been discharging a considerable excess of bile salts by the kidneys, one day complained of some curious sensations about the left eye, when I found the renal discharge of the biliary elements had gone down to nearly the normal amount. Suspecting that a retinal hæmorrhage had taken place, I sent the patient to Dr. Hartley of Leeds for his independent report, which amply confirmed my suspicion.

(*To be continued.*)

ONE HUNDRED CASES OF VARICOCELE TREATED BY THE SUBCUTANEOUS WIRE LOOP.

By RICHARD BARWELL, F.R.C.S.,
SURGEON TO CHARING-CROSS HOSPITAL.

ON the 10th ult., two lads, Henry B——, aged seventeen, and John J——, aged sixteen, came under my care for the cure of varicocele, which had caused their rejection by the examining officers of Her Majesty's navy. On April 16th I performed on these lads the operation which I introduced some years ago—viz., that of passing subcutaneously round the veins a wire loop, which, being tightened every other day, first occludes and then slowly cuts through them. In the case of Henry B——, this process was completed and the wire came away on the thirteenth day; in the case of John J——, on the fifteenth day. In neither case was there any suppuration or swelling, and only momentary pain at the times of tightening the wires. I have already described the method of operating,[1] and shall therefore on the present occasion give a very brief account of the procedure, the object of this communication being to analyse the results of 100 operations which I have now performed.

The only instruments required are a needle armed with about ten inches of silver wire, gauge twenty-six, or even a little less; a pair of pliers, and an oval shield of vulcanite, one-eighth of an inch thick, with a long diameter of an inch, a short one of about three-quarters of an inch. Near each end is a brass upright, projecting a quarter of an inch. Close to the spots where these uprights are fixed the shield is perforated by oblique channels which open on the other side near the centre. The surgeon must very carefully separate all the veins from the vas deferens, and squeezing together between his left thumb and index the two sides of the scrotum, he keeps the duct and the spermatic artery behind and the veins in front. He then thrusts the armed needle through that half of the scrotum from without inwards, thus placing the silver wire between the above-named parts; he then reintroduces the needle at the previous hole of exit, and when its point lies within the scrotal cavity he relaxes his grasp on that part, and partly by passing the needle onward, partly by manipulating the veins behind its point, he brings the original opening of entry towards it and extrudes the needle. It is only necessary to be sure that no veins escape, and that no part of the lining fascia of the scrotal cavity is included. When these manipulations are completed the veins are encircled by a loop of wire, the ends of which hang out of one puncture at the outer side of the sac. These ends are passed each through one of the holes in the shield, and when drawn sufficiently tight are secured by twisting them round the uprights. It is well, however, to place three or four folds of lint—or better still, a piece of felt, in which a slit has been cut—between the shield and the skin. Every other day the wire must be unwound from one of the uprights,[2] tightened, and replaced. Thus it acts as a very slow écraseur and cuts through the veins in some time between eight and sixteen days, according to the bulk of the varicocele.

Of the 100 cases operated on by me in hospital and private practice I have kept notes; their analysis is as follows:—In no case was there any bleeding, shivering, pyrexia, erysipelas, or other disquieting manifestation. In 16 there was slight suppuration; in 15 of these the pus found its way out along the wires, and gave rise to no trouble; in 1 a little abscess formed in the thickness of the scrotum and was evacuated by an incision one-third of an inch long. In 12 there was a little ulceration where the shield pressed against the skin; it healed when the wire came away. In 1 there was some orchitis, which lasted five days. In 71 there were none even of these trifling complications, the course of events being precisely like that of the cases above recorded. Three patients would not submit to be confined, but walked out after the second day; one of these belonged to the class in which some suppuration occurred, the other two to that in which no complication took place.

The above may be termed the immediate effects of the operation. There remain still to be considered the remote or ultimate result, and therewith the conditions previous to operation.

A (1 case)—Testicle only represented by a small pultaceous mass; the bunch of veins considerable, larger than the gland. (Patient aged twenty-seven.)

B (13 cases).—Testicle very soft and small.

C (47 cases).—Testicle much diminished and of considerable softness.

D (32 cases).—Testicle somewhat diminished and soft.

E (7 cases).—Slight varicocele operated on for the sake of passing examination.

In the first four categories, chiefly in the second, third, and fourth, the organ was the seat of more or less pain; in 23 cases this was severe.

A.—The pain ceased, and the testicle became both a little harder and larger; the patient thought it regained some function. He married five months after the operation, and is the father of four children.

B, C, D.—In every case the testicle became harder, and regained some of its dimensions immediately after the operation, but did not entirely resume its natural consistence and size until after a considerable time: in some of the worst cases, so far as I was able to trace, being as much as two years; in others, and more especially in the younger patients, three months.

E. — The slight cases under this heading passed the examining board very soon after operation.

I lost sight of most of my 100 cases within a few months of operation, chiefly hospital patients, some of whom I never saw again after their discharge. One case (*A*) I even now see occasionally, nineteen years and a half after operation. The left testicle is still smaller and softer than normal; the right one is healthy, and unusually large. Of the 92 belonging to classes *B*, *C*, and *D*, I have only seen 28 at an interval of more than six months after operation. In all of these, except 2, whose testicles were still somewhat soft,[3] a perfectly normal condition existed. One of these cases, a gentleman who had been married fifteen months, had a rather large varicocele; the testicle was very slightly softened; but he had almost constant pain in it, and after coitus this was so increased that he described it as agony. After operation the pain subsided considerably, and in seven weeks had entirely disappeared, nor did it recur. I kept this patient under observation for twenty-seven months. Three others (not included with the above 28) contracted gonorrhœa and one syphilis. Of the former, one had orchitis of the left (very slight) and one of the right testicle. The gentleman who contracted syphilis neglected himself, and remained deeply affected for nineteen months. Since that time he has remained free from any manifestation, except occasionally ulcerated fissures at the side of the tongue.

This is all the information I can give concerning the 100 operations. The safety and efficacy of the procedure are, I think, fairly attested by these results. The very slight degree of pain, either at the time or afterwards, should also be mentioned. I have operated on five cases without any anæsthetic.

George-street, Hanover-square, W.

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[1] THE LANCET, vol. i., 1869, p. 711; also vol. i., 1875, p. 820.

[2] I have lately modified twisting the wire round the upright, and now fix it by means of a binding screw.

[3] At from six to eight and eight and a half months respectively after operation.

THE agitation and controversy which have for several months existed between the Canterbury Corporation and the owners of some sixty private wells, the supplies from which were condemned as polluted and unfit for drinking purposes, are at length reported to have almost settled down.

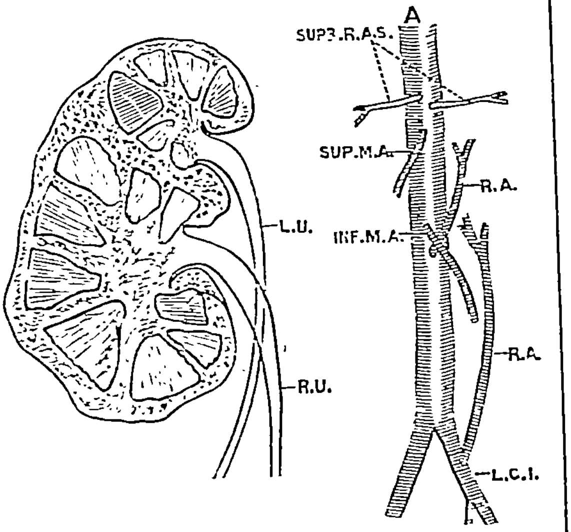
REMARKS ON TWO CASES OF SINGLE KIDNEY.

BY P. W. MACDONALD, M.B. & C.M. ABERD.,
DEPUTY MEDICAL SUPERINTENDENT, DORSET COUNTY ASYLUM.

CASES of congenital absence of one kidney are comparatively rare. Mr. Henry Morris, in an address before the Medical Society of London, said:—"Out of 8068 post-mortem cases there were but two instances of congenital absence, and one only of congenital atrophy, of the kidney."[1] To have met with two cases in less than one hundred necropsies has, judging from recorded cases, been the experience of none, and I have thought the following remarks might be of interest to those who give their special attention to the surgery of the kidneys.

The first case I met with was in 1881. The subject was a male patient suffering from epileptic dementia. He died on April 27th, and a necropsy was made forty-eight hours after death. The brain, lungs, and heart were found to be, as far as the naked eye could discern, normal. Liver large and congested; capsule adherent. Cut surface shiny and dark-coloured; blood oozed out; whole organ soft and probably fatty. Spleen normal. The liver and spleen being removed, I then proceeded to remove the kidneys, and found they were absent from where they normally ought to have been. Reflecting the mesentery and small intestines, one large kidney was found lying on the spinal column opposite the second, third, and fourth lumbar vertebræ. (Fig. 1.) It was enveloped in a natural capsule. It was large, weighing over 11½ oz., and somewhat irregularly shaped. Vascular supply abnormal and large. One branch had its origin from the aorta, and a second one from the left common iliac artery. The branch from the iliac artery, which was the larger, entered at the normal pelvis, and the one from the aorta at the second or smaller pelvis. There were two ureters. One came from the normal pelvis of the kidney, the other from a sort of second pelvis at the upper end of the kidney. Both entered the bladder normally. The one from the smaller pelvis passed behind the one from the normal pelvis, and entered the bladder on the right side (as right ureter). The other ducts and glands in connexion with the prostate were normal. There were two supra-renal capsules, one situated on each side of the eleventh dorsal vertebra, therefore quite unconnected with the kidney. Pelvic organs normal.

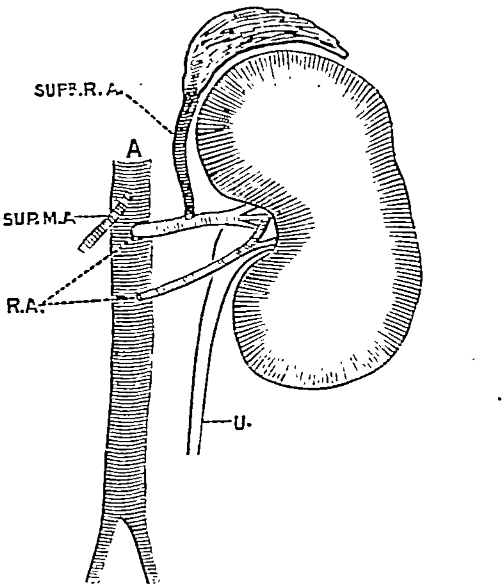
FIG. 1.



The second case was that of a female patient, who was admitted into this asylum on Aug. 16th, 1883, and died on Dec. 3rd, 1883. This patient was also the subject of epilepsy. At the necropsy, made twenty-four hours after death, the body was emaciated, and there was slight œdema of the left leg. Head: Thickening and opacity of the arachnoid over the frontal lobes and atrophy of the left superior frontal convolution. Pia mater easily removed. No apparent congestion. Heart large, and muscular structure pale; valves closed. Both lungs were studded with caseous nodules, and there were several rather large cavities in the left lung. There were pleuritic adhesions. The liver was soft and pale. On section, there were signs of commencing fatty changes. The capsule showed whitish patches. The spleen was normal. Intestines normal and no ulceration. On proceeding to remove the kidneys, no trace of the right kidney or ureter could be found. The left lay in its normal position; was large, weighing over nine ounces. (Fig. 2.) The suprarenal capsules were normal. There was one ordinary-sized ureter, which entered the bladder on the left side. There were two renal arteries; one large one coming off from the aorta below the superior mesenteric artery, and a second smaller one an inch below the larger. The larger one gave a branch to the left supra-renal capsule. The right capsule received a branch from the aorta. The kidney was congested, but not otherwise diseased. Pelvic organs normal.

In neither case was it known during life that there was only one kidney present—a fact easily understood when it is stated that in the first case the patient was an epileptic dement, and at no time of his residence in the asylum had he shown any symptom of kidney mischief, and at last died from general decay. The subject of the second case (female) was also suffering from epilepsy with maniacal symptoms, and after a short residence in the asylum succumbed to one of the most dire diseases, phthisis. The œdema of the left leg in this case was due to an enfeebled and embarrassed circulation. It will thus be seen that there was at no time any necessity to make an external examination of the kidneys, and consequently the fact remained unknown till met with on the post-mortem table. The interesting points are the abnormal site of the kidney with its two ureters, in one case, and the large and abnormal arterial supply in both. There would have been much difficulty in arriving at even a probable diagnosis as to the site of the kidney, in the first case, had need arisen to map out the kidney on the living subject, a proceeding which is at no time attended with certainty; for Mr. Luther Holden says: "I have never succeeded in satisfying myself that I have distinctly felt its rounded lower border in the living subject, nor even in the dead."[2] As already mentioned, the kidney was large and irregular. On section it seemed to be one large kidney with a smaller one joined on to its upper end. The smaller pelvis had separate and distinct pyramids, and there was a rather thick cortical layer between them and those of the larger or normal pelvis. The arterial supply was abnormal in both cases, and the branch supplied by the left

FIG. 2.



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[1] British Medical Journal, vol. i., 1883, p. 131.

[2] Landmarks, Medical and Surgical, p. 33.

common iliac artery would have caused much annoyance in any operation on that artery or in its immediate neighbourhood.

Numerous cases of the congenital absence of one kidney have been met with and reported. Mr. Jonathan Hutchinson, in a clinical lecture[3] delivered at the London Hospital, mentions a case and draws attention to the dangers that may arise in such cases from suppression of urine by renal calculi or any other untoward event. Mr. Gubbin[4] reports a case of complete absence of the left kidney and suprarenal capsule, and quotes a series of cases collected by Dr. Brenner in 1838.[5] Dr. Brenner states that in a third of his cases there was malformation or arrest of development in one or other of the genital organs. Mr. Thomas Wilmot[6] mentions a case of single kidney, and states that the apparent cause of death was the secondary formation of an abscess in the kidney. In 1878 Beumer collected a series of cases, and drew attention to the effect of the absence of one kidney on the sexual passions. In the literature on the subject to which I have had access I fail to find a reported case of single kidney with two ureters. Notwithstanding that such cases are rare, it is, nevertheless, necessary in these days of advanced abdominal surgery to recall and bear in mind such important abnormalities, for a timely thought in this direction might save both surgeon and patient from unpleasant recollections.

Dorset County Asylum.

ON AURAL EXOSTOSES.

BY GEORGE P. FIELD, M.R.C.S.,

AURAL SURGEON TO ST. MARY'S HOSPITAL.

THE following four cases of exostosis in the auditory canal have been recently under treatment by me. I now place them on record—first, because they afford further demonstration of certain important facts which I have already insisted on—namely, that ivory aural exostoses can be successfully removed, not only without great risk, but with decided benefit to the patient, relieving him sometimes of grave cerebral symptoms, and, as a rule, completely restoring the power of hearing; secondly, because I find that it is still customary to inform persons afflicted with these growths that they must make up their minds to endure permanent deafness, the dangers of any possible operation for their relief being such as to render it entirely unadvisable. How contrary to actual experience is this latter statement has been well shown by my first case, that of Dr. G. M—— of Waterford, operated on in October, 1877, and described in THE LANCET for July 20th of the following year. As I have there remarked, the patient, when I first saw him, was suffering from extreme depression of spirits; for, knowing each of his ears to be completely obstructed by a dense bony tumour, he felt himself to be for life debarred from the pleasures of society. The result of operation in his case was thorough restoration of hearing, which now, after the lapse of eight years, remains as good as ever.

The origin of ivory aural exostoses has been repeatedly attributed to gout, rheumatism, or syphilis, alone or combined; but, as I first pointed out in the discussion of my earliest case, a certainly far more general cause is a chronic inflammation of the walls of the external meatus, such as might be produced by habitual sea-bathing. The Hawaiian islanders, as readers of works of travel are aware, are practically amphibious; and Professor Wyman has directed attention to the significant frequency of ivory exostoses in the external auditory meatus of their crania. The four cases that I have operated on during the past three months, I have been interested to find, afford evidence of one and the same exciting cause—persistent sea-bathing. A former opinion of mine, that hereditary predisposition might be excluded from the probable sources of ivory aural exostoses, I have had occasion to modify to some extent; for one of my most recent patients is a younger brother of my first case, and suffered in an exactly similar way from exostoses in both ears, though happily, unlike him, requiring only one operation for their extirpation, instead of repeated treatment occupying altogether seven hours; it must, however, be noted, that both patients had for years been accustomed to bathing in the sea three or four times a day. In hospital practice I have, as others, remarked, the absence of instances of ivory aural exostosis, whereas the softer growths are not infrequent. Seemingly another peculiar feature in connexion with the disease is that in certain districts it is commoner than in others. Thus, I have had four cases from Waterford, three from Ipswich, several from the south of Ireland, and one each from Hull and West Hartlepool, &c. The operation of drilling the tumours with the American dental engine, as first suggested by Dr. Arthur Mathewson of New York, I have more than once described.[1] For further information as regards the varieties, mode of occurrence, and characteristics of osseous tumours of the meatus, I would refer to the third edition of my book, p. 69.

I will now proceed to give, as briefly as possible, an account of my four most recent cases.

The first is that of Mr. W. G. D. G——, aged forty-six, a gentleman living near Waterford, whose history I do not think I can do better than give in his own words, as follows: "I was first troubled by an abscess in my right ear in Sept. 1883, the effect, probably, of sea-bathing, and the frequent use of an old spring-board some beggar put up on Kelly's Rocks, evidently for the benefit of the medical profession. The abscess caused deafness for some three or four weeks, but was eventually cured by the application by Dr. O'Farrell of a solution of caustic. In October, not being satisfied with the feel of my ear, I consulted Mr. Fitzgerald in Dublin, who said the passages in both ears were much contracted, and I might eventually have to get them operated on. He prescribed a lotion, which I used for some time, and hearing came back all right. In 1884 I was yachting from the middle of May till the end of September, and took a header or two off the main boom each morning. At the end of the season I was again troubled with an abscess, this time in the left ear, causing deafness. At the end of November I consulted Mr. Field, who diagnosed double ivory exostosis. After the removal of a polypus from the left ear its hearing returned; but the exostoses had now so increased that, as soon as I could spare time, early in February, I had the worse ear, the left, drilled, the operation lasting sixty-five minutes. In consequence of leaving London before the ear was sufficiently healed, it became filled with granulations, which gave much trouble to get rid of from the beginning till near the end of March. On the 9th of that month the other, or right, ear was operated on, chloroform being administered for one hour and ten minutes, and in it also hearing is now (April 11th) nearly restored." I may add to this account that by April 25th audition was quite perfect in the left ear, and well nigh so in the right.

The next case is that of Mr. S. W——, aged twenty-six, sent to consult me by Mr. Swannick, of West Hartlepool, in Nov. 1883. He was then suffering from slight deafness of both ears, caused by the presence of exostoses, which I suggested should be removed if they gave rise to any further trouble. When, in Feb. 1885, he came back to me, I found the left external meatus considerably lessened in calibre, and the right almost completely blocked by the exostoses. I had now no hesitation in recommending early extirpation of the growths. On Feb. 24th, chloroform having been administered, I succeeded, after fifty minutes' labour, in effectually drilling through the obstruction in the right ear. The patient recovered well from the operation, and had one or two returns of his nocturnal giddiness during the next few days. My colleague, Dr. Broadbent, who saw him, kindly gave me the following opinion of his case:—"Mr. S. W——'s attacks may be conveniently called epileptiform, but they have not the character of epilepsy proper, inasmuch as there appears to be neither convulsion nor loss of consciousness. I am disposed to fear that they differ in a more important respect, and that they are attended with danger to life. I do not think, however, that, like some of the cases recently reported, the attacks are due to the slow pulse with which they are accompanied. In my opinion they are cerebral in origin, and the retardation of the pulse is secondary. I did not find much on examination which threw light on the case. The optic discs were small and pink and without sharp outlines; and the retinal veins were large; but there was no neuritis. The right temporal artery was more conspicuous than the left, and pulsation was visible in it. It is quite possible that the attacks may have been due to the exostosis which you have removed, especially if secretion had accumulated behind it; but time alone can decide this. The case puts me strongly in mind of one that I saw many years since. The attacks, one of which I witnessed, corresponded closely with the description given by Mr. S. W——, and the intellect was unimpaired to the last. The patient died in an attack, and on examination there was found tremendous thickening of the frontal bone. In any circumstances it was right to remove the exostosis; and I shall be greatly interested in the result." The result was so far satisfactory that the hearing became quite restored in the ear operated on, and the patient, after a month's absence, went home apparently quite well. On the 29th of April Mr. Swannick wrote to me as follows:—"Since his return he has had a few fits, one of which, at evening service on Sunday, was severe. From that date till now I have been giving him bromide of potassium three times a day, and he has had only one slight attack. The gloominess and depression that come on every evening at about 7 o'clock are diminishing, and he feels altogether happier. The only question that now arises is whether the second ear (the left), which is almost closed, should be operated on."

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[3] THE LANCET, vol. ii., 1874, p. 1.

[4] British Medical Journal, vol. i., 1883, p. 115.

[5] Virchow's Archiv.

[6] British Medical Journal, vol. ii., 1883, p. 1014.

[1] See THE LANCET, July 20th, 1880, and April 1st, 1882; British Medical Journal, Nov. 24th, 1883; also see Roosa's work, sixth edition, p. 495.

The next case, that of Dr. W. L. M—— of Waterford, brother of Dr. G. M——, operated on eight years ago, as above mentioned, is thus described by the patient himself:—"W. L. M——, a medical man, aged thirty-five, strong and healthy, has been all his life a great sea-bather. He has never had syphilis. In August, 1884, he first began to experience a disagreeable 'fulness' in the ears, most marked in the left; unaccompanied, however, by either pain or deafness. Thinking this was probably caused by the presence of wax, on Aug. 19th he syringed out the left ear with warm water, rendering it immediately very deaf. As during the next few days hearing was not recovered, he became uneasy; and on the 22nd he consulted Dr. Storey in Dublin, who diagnosed a large exostosis in each ear, with irritation and inflammation of the left meatus. A solution of nitrate of silver (ten grains to the ounce) having been applied daily, the patient on the evening of the 28th recovered his hearing. Mr. Field, whom he saw in London on Sept. 22nd, confirmed Mr. Storey's diagnosis. The exostoses were then both of considerable size, that in the right ear being the larger; but as there was still ample room for the passage of sound, Mr. Field recommended him to report himself at intervals, so that the progress of the disease might be observed. For the next few weeks no inconvenience whatever was experienced. On Oct. 23rd, when Mr. Field was again consulted, there was evident, but still only very little, enlargement of the right exostosis, while that of the left was scarcely perceptible. On the occasion, however, of the next visit, on March 12th, 1885, although hearing had in the interval continued perfect, and no distress or pain had been suffered, Mr. Field advised an operation without further delay, both exostoses having increased so much that an extremely constricted space remained for the admission of sound. The patient accordingly went home, and, having made the necessary arrangements for remaining in London, returned thither on March 24th. On the same day Mr. Field operated on both ears. The exhibition of chloroform, which lasted fifty-five minutes, was not followed by any sickness, pain, sleeplessness, or lack of appetite. There was, however, great deafness, and on the day after the operation healthy pus was discharged from both ears. On March 27th the patient was able to be up, and on the 30th he called on Mr. Field in his own house. On April 16th whilst still very deaf he removed from London. On the day following the left meatus cleared up sufficiently to admit of distinct hearing for about three hours, the right improving in a less degree. During the next fortnight hearing was very variable, being sometimes perfect with the left ear for hours, at other times absent for days together." On the return of the writer of the above from Ireland, on May 8th, to see me again, I found the ears still somewhat swollen but presenting plenty of room for the passage of sound. The curious feature in this case is its exact resemblance in symptoms and in the gradual recovery of hearing by both ears to that of the brother, Dr. G. M——, already alluded to.

My next instance of removal of aural exostosis is afforded by Mr. H. C. W—— of Ipswich, aged twenty-five, who has furnished me with the subjoined account of himself previous to the operation:—"It was in May, 1881, that I first felt inconvenience in hearing, but my deafness, which was not total, passed off in some four weeks. In January, 1882, I gradually lost all use of my right ear; and during the end of February and early part of March I had much pain in it, which my doctor could not relieve. On the 28th of last month I called on Mr. Field, who told me the ear would require an operation. He gave me a lotion which almost immediately relieved my pain, and after applying this thrice a day for some three months my hearing returned. Subsequently, until December, 1884, I was able to hear perfectly, although conscious of something in the ear which prevented one from pulling it about with impunity. In that month I grew quite deaf; and in March, 1885, I began once more to suffer pain, which was very acute. When, on April 13th, I for the second time consulted Mr. Field, he pronounced an operation absolutely necessary, and this, on the 21st, was performed." It remains to be added that in this case the growth was very large, and, after the use of the drill, had to be broken up with bone forceps,[2] in a manner similar to that described in THE LANCET, April 1st, 1882. The patient recovered well from the operation, which lasted sixty-five minutes. His hearing is now (May 10th) almost perfect, and in a few days he will return home.

A consideration of the above and other cases leads one to the following general conclusions with respect to ivory aural exostoses:—1. They are by no means necessarily associated with a rheumatic, gouty, or syphilitic diathesis. 2. Their causation can, with strong probability, be ascribed in many, if not in all, cases to some local irritation of the external auditory meatus, such as may be set up by habitual sea-bathing. 3. They can be most efficiently treated only by drilling, which with proper precautions—notably the use of a pliant and not brittle steel guard to protect the ear in the event of slipping of the drill—is a perfectly safe operation. 4. Their prompt removal is indicated in all cases where (*a*) they hinder the elimination of secretions and discharges from the auditory canal; (*b*) where they occasion pain by pressure on neighbouring structure; (*c*) where they threaten completely to block the meatus, and so to deprive the patient partially or wholly of hearing.

Lower Seymour-street, W.

THE BULLÆ OF PEMPHIGUS.

BY GEORGE THIN, M.D.

IT has been stated by Gibier[1] that acute pemphigus is due to a parasite. The microbe of acute pemphigus, according to this author, presents a beaded appearance when fully developed, the elements being grouped in rows consisting of two to twenty joints. Development takes place from minute spherical bodies isolated or irregularly grouped, or contained in zooglœa. This organism was found in the liquid of the bullæ, and in the urine of the patient who formed the subject of his investigation. In the liquid of the bullæ in a case of chronic pemphigus the same author found a few bacteria moving slowly (*rares bactéries à mouvements lents*).

In a well-marked case of pemphigus in which I have recently examined the fluid of the bullæ I was unable to discover any organism.

A tall strong man, aged fifty-two, who had always enjoyed good health, consulted me on February 3rd, 1885, on account of an eruption. He stated that two months previously he had a rigor, and that within the next two or three days several "bladders" appeared on his forehead. Others then came out on his chest, arms, and legs, and had continued to appear more or less ever since. I found his face, neck, temples, and ears the seats of a bullous eruption, which in the aggregate involved on the lower part on the face more than half the surface. There were also several bullæ on the chest, back, arms, and legs, some being full of clear serum, some collapsed, and some burst, leaving a red moist surface covered with folds of epidermis. His general health was not perceptibly impaired. Fresh bullæ continued to come out, and I had an opportunity of observing them in the earliest stage from their first appearance as minute, scarcely raised, vesicles, not much larger than a pin's head, with a central depression, and as large bullæ about two inches long, three-quarters of an inch broad, and about half an inch high.

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[2] This was one of those cases which may be dealt with by the use of a chisel and hammer, or, as I prefer, by bone forceps, for the exostosis was not so hard as in the three cases just described. A large quantity of bone was removed from this patient's ear, and the external auditory meatus afterwards looked large and open. The chisel I believe to be absolutely useless for ivory exostoses, and nothing but the drill, which makes only a small orifice (quite sufficient for the passage of sound), is of any service.

[1] Annales de Dermatologie et de Syphilographie, vol. iii., p. 102.

On three separate occasions I examined the fluid of the bullæ microscopically without observing any organisms. I also prepared a number of cover glasses, on which the fluid was dried in the now familiar way, and the glasses, after being heated, were floated on solutions of aniline dyes and properly prepared for examination. No organisms were stained. In one preparation, examined fresh with the addition of a solution of gentian violet, some epidermic cells were found in the fluid, and to one of these micrococci were found adherent. The results of examining the fluid of the bullæ, both fresh and after being dried and stained, were thus, so far as organisms are concerned, entirely negative. A few white blood-corpuscles were found in the fluid. On Feb. 6th and 10th attempts were made to cultivate any organisms that might be present. The bullæ were opened largely with a purified lancet. A pure platinum wire was plunged into the depths of the bullæ, and tubes of sterilised gelatine-peptone meat infusion inoculated in the usual way. Two neutral, two alkaline, and one acid tube were thus inoculated and put aside at the ordinary temperature of my laboratory. Up to April 13th nothing had grown in the tubes, the gelatinised meat infusion having in the meantime become considerably shrunk.

These observations do not prove that no organisms are present in the fluid of the bullæ of chronic pemphigus, but they tend to show that typical pemphigus may exist without the presence in the bullæ of organisms which can be put in evidence by the methods on which reliance is now placed. The organisms described by M. Gibier could not have been present in my case.

Queen Anne-street, W.

A CASE OF LUMBAR COLOTOMY.

By WILLIAM DOBBIN, M.A., M.D., &c.,
MEDICAL OFFICER, BANBRIDGE DISPENSARY.

ON March 24th, 1884, I visited a dispensary patient, Elizabeth L——, aged seventy, married, residing at Tullyrain, near Banbridge. She was a tall woman, emaciated and cachectic-looking, but was not confined to bed. She stated that she was troubled with piles, and had suffered from painful defecation, attended with a bloody discharge, for nearly three years. Lately her condition had become much aggravated as the constipation was more difficult to overcome, and there was much distressing tenesmus. On examination I found that there was a small tumour of stony hardness at the posterior margin of the anus, which doubtless had been formerly a pile, but was now a mass of scirrhus. The sphincter was a rigid circle which would admit only the tip of the finger, the introduction of which caused extreme distress. Per vaginam I found that a hard nodulated mass extended upwards for some four inches, projecting into the vagina in front and apparently encircling the lower end of the rectum. Avoiding mention of the dreaded word cancer, I told the patient that the only mode of relief was by an operation, but that it might be delayed for some time if she were careful to keep the stools soft by castor oil. An occasional opiate was administered when the pain was very severe, and I kept her under observation, visiting her from time to time when in the neighbourhood.

Matters went on without much marked change for nearly four months, when, on the 17th of July, I received a message saying that she could not bear her condition any longer, and that she would submit to any operation for relief. As soon as possible I proceeded to her house accompanied by Dr. Smyth, J.P., and Dr. Tweedie of Banbridge, who kindly afforded me their valuable advice and assistance. They concurred in the diagnosis of malignant stricture of the rectum, and agreed that lumbar colotomy ought to be performed at once. Chloroform having been administered, the colon was opened in the left loin by Callisen's operation as modified by Mr. Bryant, all of whose directions in the various steps of the operation were carefully followed. Hardly a tablespoonful of blood was lost. Some difficulty was experienced in seizing the gut, as rather unexpectedly it was found to be empty. After the sutures were fastened the part was dressed with carbolised oil on lint, a pad of oakum was applied, and the whole secured by a binder. Ordered to have milk diet for a few days, and fifteen minims of tincture of opium in half an ounce of water every four hours.

July 18th.—The patient has passed a good night, and feels very comfortable. Pulse 80; tongue clean; skin cool; no pain or tenderness. Wound dressed; looking healthy. Ordered five grains of compound ipecacuanha powder every four hours in place of the draught.—19th: Wound dressed. The patient feels very comfortable.—20th: Wound dressed. A good deal of flatus has passed through artificial anus, but no fæces. Flatulent distension complained of; a linseed-meal and mustard poultice to be applied to abdomen. In addition to anodyne powders, to have a grain of quinine three times a day.—21st: Wound dressed. Since last visit there has been a free discharge of semi-fluid fæces through artificial anus; abdomen much less distended; some appetite for food; in good spirits. Compound ipecacuanha powder to be discontinued, except five grains at bedtime.—22nd: Wound dressed; free discharge of fæces continues; sutures removed; most of skin wound healed by first intention; opening in bowel firmly united to skin.—23rd: Wound dressed. Discharge of fæces has been enormous since the middle of the night; a good many scybala have passed.—24th: Wound dressed. Since last visit fæces have passed in large quantity, but have now ceased. She is clean and comfortable, and is in good spirits.—25th: Since last visit a small quantity of fæces passed per vaginam. This happened only once.

On July 28th, during the night, the patient's husband, who alone lived in the house with her, died suddenly in the bed beside her; and the poor creature, being dreadfully frightened, made her way in a half-dressed state to the house of a relative, who lived about half a mile off, for the purpose of seeking assistance. Fortunately, the journey did her no injury, although she fell several times. After the fatigue passed away she made a capital recovery. A pad of fine tow was kept constantly over the artificial anus, and was fastened in position by a binder. A new pad was applied after each action of the bowels, which took place usually once in the twenty-four hours. Under these circumstances the woman's health continued fairly satisfactory till the end of October, when a large abscess formed and discharged in the left hip. From this period she gradually became weaker and more cachectic, and finally sank on Nov. 24th, four months and seven days after the operation.

Remarks.—Surgical interference without doubt prolonged the life of this patient. It not only relieved her from painful and exhausting straining efforts at defecation, but retarded the progress of her malady by preventing the irritating passage of the fæces over the diseased bowel. What is more important still, existence was rendered endurable and the woman was enabled to end her days in comparative comfort. After the first week she told me she was easier than she had been for two years, and that she was already more than compensated for submitting to the operation. Such a result is ample justification for operating, and I should have no hesitation in recommending colotomy in a similar case. The operation is not excessively difficult, if Mr. Bryant's directions as given in his work on the Practice of Surgery are carefully attended to, and it is not more dangerous than herniotomy, if done in good time. There is no necessity for a patient the subject of artificial anus to wear any special appliance, since a pad of fine tow is quite sufficient. It is cleanly, cheap, and a fresh one can be put on whenever required. I have reported this case, occurring in the practice of a country surgeon, as it may encourage others similarly situated to carry out a serious operation even in the confined bedroom of a dispensary patient.

Banbridge, co. Down.

DR. G. E. PAGET.—At the next quarterly meeting of the governors of Addenbrooke's Hospital, the Lord-Lieutenant of the county will, on behalf of the governors, be asked to accept a bust of Dr. George Edward Paget, F.R.S., Regius Professor of Physic in the University of Cambridge, which has been provided by the subscriptions of a large number of persons, the list being headed by his Royal Highness the Prince of Wales and his Royal Highness Prince Edward of Wales.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. & Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

SURGICAL CASES UNDER THE CARE OF MR. BRYANT.

OF the following cases, the hernia, which was under the care of Mr. Bryant, is an example of an unusual condition of the hernial sac and position of the intestine, for which it is somewhat difficult to account without a history of taxis. The case described by Mr. Bond is uncommon. There is a similar condition illustrated in the article on Hernia in "Holmes's System of Surgery," vol. ii. The series of abdominal operations performed by Dr. Wallace are interesting and important.

CASE 1.—*Intra-parietal Strangulated Inguinal Hernia; Operation; Recovery.* (Reported by Mr. Rymer.)—Maria E——, aged fifty-three, was admitted into Lydia ward on Oct. 4th, 1884. The patient is healthy, and has had twelve children. She has had a slight rupture for years; it appeared after a strain. She kept her bed at first for about a week, and has worn a truss pretty regularly since. On the 3rd she neglected to put on the truss, and the rupture came down. She applied the truss, and the rupture appeared to go up, but she felt uncomfortable all day, and in the evening was sick. She did not sleep all night. Next morning she was sick again, and the vomit appeared fæcal.

On admission, when the patient was lying on her back in bed, no external signs of rupture were visible, but upon manipulation a tense swelling could be felt in the right inguinal region behind the abdominal muscles, above and external to the internal ring. The patient had another fæcal vomit. She was given chloroform, and an exploratory incision was made about an inch in length over the middle of Poupart's ligament, and one inch above it. The inguinal canal was laid open and the internal oblique and transverse muscles divided. When the sac was reached it appeared very much to resemble the tunica albuginea of the ovary. When this was opened a small quantity of bloodless fluid escaped. On careful examination this sac proved to be the old inguinal sac, hardened and thickened by the constant pressure of the truss. The finger was introduced and another large sac was felt. This sac was well slit up with a pair of scissors, and at one point there was a ring which admitted the finger into the peritoneal cavity. This ring was freely divided. Now the intestine could be seen, and was taken up and pushed back into the abdomen. The parts were put into apposition and held by three gut stitches, and the wound dressed with a pad of iodoform gauze and a sponge. This unusual appearance was seemingly caused by the constant pressure of the truss having broken down the band of the first sac and forced the intestine into a second sac, which was formed between the peritoneum and the iliac fascia. The patient had diarrhœa after the operation. A one-grain opium pill was given; ice to suck.

Oct. 5th.—Patient has not been sick since the operation; she feels easier. Wound dressed; there was very little discharge.

7th.—Diet: milk, beef-tea, bread-and-butter.

8th.—Bowels acted once yesterday; no diarrhœa. Wound appears somewhat swollen and inflamed.

10th.—Part of wound has healed by primary union; the inner part gapes a little; patient is in no pain.

12th.—Discharge rather purulent.

20th.—Wound very healthy.

24th.—Wound entirely healed.

Nov. 4th.—Patient has a well-fitting truss. Got up in the evening.

8th.—Went out apparently quite well, except for a cough.

CASE 2. *Dislocation of the left Knee-joint Outwards; Reduction; Cure.* (Reported by Mr. Paget.)—Philip D——, aged forty-eight, an ostler, was admitted into the Accident ward on Oct. 1st, 1884. The patient was leading a horse when it became frisky and knocked him down, twisting his leg He could not rise, and was brought to the hospital.

On admission there was dislocation of the left tibia and fibula outwards off the internal condyle of the femur. There was effusion of fluid into the knee-joint. Under chloroform the leg was flexed upon the thigh, and then extended with traction inwards, the thigh being held outwards. The bones slipped easily into their place. The fibula appeared a little loose. The leg was put upon a back splint with foot-piece, and cold, by means of Leiter's tubes, applied to the knee. One-sixth of a grain of morphia in solution was injected subcutaneously.

Oct. 2nd.—Did not sleep well. In a good deal of pain.

3rd.—Still in a good deal of pain, and there is considerable effusion into the knee.

21st.—Effusion going down. Ice bag still on.

28th.—Knee still feels hot. Left knee measures 14½ in. round; right knee 13¾ in.

Nov. 4th.—Bavarian splint put on.

14th.—The circumference of both knees is now the same.

CASE 3. *Lipoma of Scalp; Excision; Cure.* (Reported by Mr. Palmer.)—Henry H——, aged thirty-nine, a coachman, was admitted into Job ward, on Oct. 13th, 1884. The patient has had good health all his life. Twenty years ago he first noticed a swelling about the size of a pea on a level with the tip of his left ear and 2 in. posterior to it. It was pulpy and freely movable over subjacent bone, and not painful; this has gradually increased in size. On admission, the tumour is about the size of a hen's egg—i.e., 3½ in. from above downwards and 4 in. from side to side. It is soft and pulpy; there is no fluctuation; the bone beneath the growth appears to be excavated. The skin is not dimpled, and can be drawn together over it.

Oct. 14th.—Under chloroform, an elliptical incision was made from above downwards. The skin was dissected from either side of the tumour. The integument was found to be much adherent, and it was necessary to separate it down to the base of the swelling. The tumour was then removed, and the wound dressed with iodoform gauze. The growth was a pure lipoma.

21st.—The patient has had hardly any pain or inconvenience from the operation. The upper part has healed by primary union. The remainder is granulating.

Nov. 3rd.—Wound quite healed, and there is no discharge whatever. The patient feels quite well.

This case is worthy of record from the fact of the position of the tumour, lipomata being very seldom met with on the head.

BRISTOL GENERAL HOSPITAL.

CASES OF ANEURYSM IN THE LOWER EXTREMITY TREATED BY DIGITAL COMPRESSION; REMARKS.

(Under the care of Mr. NELSON C. DOBSON.)

CASE 1. *Simultaneous Aneurysm of both Popliteal Arteries.* T. F——, aged forty-three, a healthy, well-made man, a gamekeeper by occupation, and subject at times to considerable exertion in the way of walking and watching, was admitted in 1880. Has had gonorrhœa, but not syphilis; takes freely of beer, but is not a spirit drinker; his father suffers from gout, but the patient has never suffered from this; there is no albumen, and the heart sounds are normal. He states that two years ago he noticed an aching pain in the bend of his left leg, and some time since he discovered a swelling in the ham, which pulsated. He, however, continued to work regularly. Six weeks ago he noticed a similar swelling in the right ham.

When the man came under Mr. Dobson's notice there was an aneurysm in each popliteal space—that in the left being the larger, and measuring five inches in length and three inches in breadth; the swelling on the right side being as large as a hen's egg. Both swellings exhibited the ordinary characteristics of aneurysm, but in both firm pressure of the stethoscope was required to bring out the bruit. There was nothing abnormal about either limb otherwise. No other aneurysm could be discovered elsewhere. The heart was irritable in action, and the whole arterial system seemed to partake of the same irritability, both femorals at the groin pulsating unduly and giving one the idea that they were rather dilated at that point. He was kept in bed for a fortnight, and ordered a restricted diet according to Tufnell's plan, with for a few days five drops of tincture of digitalis three times a day; and during the fortnight he was also given regularly five grains of iodide of potassium three times a day. Mr. Dobson did not attach much importance to the drugs, except perhaps that the digitalis steadied the circulation; he believed it to be a drug, though suitable to this particular case at the outset, which requires much caution in its administration in aneurysms. Probably diet and quiet were most useful of all the medical treatment.

On May 13th digital compression was commenced by relays of students. Prior to its commencement a quarter of a grain of morphia was administered subcutaneously, and a like amount after about eight hours. The method of applying the compression was in all cases the same—viz., first ascertaining the dead weight that would control the pulsation (in this case about seven pounds); a graduated bag filled with shot to this weight was made. The compressors were two at a time, the duty of one being to place his index, middle, and ring fingers across the artery at the pubes; the weight was then placed over the middle finger, and thus with very little exertion on the part of the assistant and with but small discomfort to the patient the circulation was controlled. The second assistant applied his hand lightly to the aneurysm, and immediately informed his colleague when the circulation was not effectually controlled. This last point Mr. Dobson considered most important, as he had formerly found without this observation on the part of the second assistant that the person in charge of the artery above was inefficiently controlling it. By the small expenditure of force required when aided by the weight, two assistants could work satisfactorily for two hours, changing places every twenty or thirty minutes. After sixteen hours the pulsation in the left popliteal was thought to have ceased. On the next day, however, as there was slight pulsation, digital compression was continued, and after three hours and a half it was finally left off. On the 17th there was a slight thrill in the sac, but no pulsation; and on the 19th there was slight pulsation in the posterior tibial. No especial symptoms followed the compression, and the aneurysm was cured. After giving the patient some days' rest, digital compression of the right femoral in the groin was commenced in the same way, and the aneurysm of the right popliteal was cured after eleven hours and a half. The after-progress was satisfactory and without feature. This patient was seen recently, and he was continuing quite well.

Case 2. *Large Aneurysm of the Left Femoral at the Apex of Scarpa's Triangle.*—H. P——, aged sixty-three, a shoemaker, was admitted on Jan. 16th, 1885. He is an anæmic, flabby, delicate-looking man; never had syphilis. Four years ago he was kicked by a man in the region of the present swelling. There is a slight scar in the skin in this situation, but from careful inquiry the conclusion was arrived at that the blow had nothing to do with the aneurysm. The heart is sound, and no aneurysm was discovered elsewhere. The femoral is dilated in the groin, and pulsates forcibly. There is a swelling in Scarpa's triangle as large as an infant's head; he first noticed this about a month ago; it was then not larger than a hazel nut. There is not much pain, and no œdema of the limb. The swelling pulsates with marked distensile pulsation, and on auscultation there is a very decided bruit. The swelling is soft, and gives one the idea of its walls being tolerably thin; no arcus senilis; pulse 76. He was kept in bed, liberally fed, and had a mixture of iron and quinine for a week. On Jan. 23rd, at 10.45 A.M., digital compression, assisted by an 8 lb. weight, was commenced, a quarter of a grain of morphia having been previously given subcutaneously. The details were the same as in the former case, hot water bottles being placed in his bed, and the limb lightly wrapped in cotton-wool. 2.15 P.M.: The limb was blue and congested, with some amount of swelling generally. The patient was drowsy and pale, his pulse feeble, and he was sweating profusely. The tumour still pulsates. By 6.30 P.M. the congestion had passed off; it was probably occasioned by too much pressure, especially on the vein; the tumour is diminished in size; pulsation in the sac is not well-marked when pressure is taken off the artery. Compression was continued until 8.30 next morning (about twenty-one hours). There is still slight pulsation, but the sac feels firm and solid. On Jan. 27th, not being quite satisfied with the condition, Mr. Dobson ordered digital compression again for six hours, when the aneurysm was cured, and has remained so; the bruit had ceased entirely after four hours' compression on the second occasion. The tumour, which is now solid, is diminishing in size, and the superficial femoral above the tumour can be felt blocked. In the beginning of April this patient was again seen, and was remaining well.

Remarks by Mr. Dobson.—The points of interest in Case 1 are that both popliteals were affected at the same time; the combination of weight, indirectly applied through the fingers of a skilled assistant; and the immediate appreciation of any defect in the process by his colleague who had charge of the aneurysm. These may seem small matters, but it is the small matters that make up the difference between success and failure in digital compression. I regard Case 2 as particularly successful, because I considered the patient a bad subject for any operative interference, and from his general condition, as well as the local condition of the artery, I felt sure that had digital compression failed the Hunterian ligature would have laid him open to more than ordinary risks. The blueness and congestion of the limb were very ugly to look at, but they soon passed off when the pressure was moderated. In both cases I endeavoured to check entirely the blood stream through the aneurysm during the compression. It was found necessary to caution the assistants against over-exerting themselves, there being a natural tendency to employ more force than was absolutely necessary to check the blood stream, but the success of the cases was attributed in a great measure to their intelligence and zeal. The first aneurysm was thus cured by nineteen and a half hours' compression divided into two terms of sixteen hours and three hours and a half. The second aneurysm was cured by eleven hours and a half of continuous compression; and the third by about twenty-one hours on the first occasion and six hours on the second, with an interval of three days between the two; a result which may be considered favourable when compared with the statistics of instrumental compression. Spontaneous aneurysms of the lower extremity are surgically amongst the most interesting of the aneurysmal class; but judging from my own experience in the Bristol General Hospital I should say that in this part of the country at least they are not common. I have only admitted under my own care during the last ten years three cases of this disease in the lower limbs, and I can only call to mind another instance of this disease in which my colleagues have sought a consultation during the same period. I have, therefore, thought that a short history of the two cases might be of surgical interest, not only on account of the complete success of the treatment adopted, but also as illustrating certain important points in the history of such cases, as well as allowing me the opportunity of emphasising the importance of the minute attention to detail which is necessary to bring to a successful termination any such case. With reference to the first case which I have mentioned, sufficient time—viz., five years—has elapsed to be certain of the permanence of the cure.

LEICESTER INFIRMARY AND FEVER-HOUSE.

STRANGULATED FEMORAL HERNIA WITHOUT CONSTIPATION; OPERATION; DEATH; NECROPSY; REMARKS.

For the following case we are indebted to Mr. C. J. Bond, house-surgeon.

E. H——, a healthy woman, aged fifty-seven, has suffered from right femoral hernia for four years, and has never worn a truss. The hernia had been reducible up to Nov. 27th of last year, when during exertion the tumour suddenly increased in size; in a couple of hours the patient felt sharp pain in the swelling, and vomiting occurred. From this date (Nov. 27th) up to her admission on Jan. 7th, 1885, she suffered more or less from vomiting, which came on at irregular intervals, and is said to have "smelt very bad" on one occasion. The bowels were moved irregularly at intervals of two or three days. Sometimes there was diarrhœa, and the last motion was on Jan. 4th, three days before admission. Up to this time she had been getting up, and went to see a medical man on this day. On her admission on Jan. 7th she was in a state of semi-collapse, but was operated on immediately. The little knuckle of gut, though red, was not very dusky, nor apparently much inflamed, and in no way gangrenous. The stricture, which was tight, was divided, and the gut returned. No omentum was seen. The patient never rallied after the operation, and died in a few hours.

Necropsy, with remarks by Mr. Bond.—The portion of intestine was found lying close to the opening of the crural canal;

the mark left by the constricting band was very plain, and, what is especially noteworthy, did not involve the whole circumference of the intestine, but passed obliquely on one side within about half an inch of the mesentery, and on the other rather nearer this edge; thus not obliterating the whole calibre of the bowel, but leaving a narrow channel along the mesenteric border of the gut. It is this fact which, I think, throws light on the peculiarity of the symptoms; for here is a case of strangulated hernia in which the strangulation is so complete in a portion of the intestinal tube as to lead to perforation, and yet in which, owing to the obstruction having been partial only, the symptoms are spread over a period of six weeks, and the bowels are moved, though irregularly, throughout that time. Attention seems to have been diverted from the real cause of the symptoms by the fact that though the patient vomited she did not get appreciably worse, and by the absence of constipation. The standard works on surgery mention no exception to the rule of complete constipation in strangulated hernia—in fact, do not refer to cases of strangulation of portions only of the whole calibre of the small intestine; and the condition doubtless is not common. At the same time there are specimens showing it in several of the London museums—two in that of University College, described in the catalogue by Beck and Shattock; but no account is given of the symptoms before operation. It would thus seem well to remember that it is possible to have cases of strangulation of a knuckle of intestine of such severity as to lead to perforation, there being no constipation, the symptoms resembling those of a case of chronic partial obstruction of the whole tube. At the upper part of the site of the stricture at one spot there was an opening into the intestine, through which fæcal matter had, evidently just before death and since the operation, escaped into the peritoneum, and helped to bring about the fatal result; there was no general peritonitis. In The Lancet for March, 1882, I published some cases from which it seemed to me very probable that in cases of injury to the intestinal wall from extreme nipping, the perforation takes place from within outwards, and not from without inwards, commencing in ulceration and destruction of the mucous coat first, and, as in this case, nearly always at the site of the upper stricture, or that limiting the upper, full, dilated portion of intestine above the strangulated part. In this case it would also appear that the tight constricting band, though involving only a portion of the whole calibre of the gut, had by pressure caused not only ulceration of the mucous membrane at several points along its path, but at one point destruction of this and the muscular coats, leaving only the band itself, the thin peritoneum, and some plastic lymph to close the opening. As long as the knuckle of intestine remained *in situ* no escape occurred; but as soon as this band was divided, the adhesions broken down, and the intestine returned into the abdomen, fæcal matter rapidly escaped, though none was seen at the time of the operation, and the gut was for this reason returned instead of being left, with the stricture relieved, outside the abdomen, or an artificial anus being made.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Hæmaturia from Bilharzia Hæmatobia.—Experimental production of Chorea.

An ordinary meeting of this Society was held on the 26th inst., Dr. George Johnson, F.R.S., President, in the chair. The meeting was prolonged for half an hour in order to discuss the second paper.

Dr. Spencer Cobbold read a paper on cases of Hæmaturia due to Bilharzia. The author explained that the terms "endemic hæmaturia" and "Bilharzia disease" can no longer be regarded as synonymous, and insisted upon the necessity of separating the dysenteries and hæmaturias that are, and that are not, due to parasites. Any measures of prophylaxis, to be successful, must have for their basis an intimate knowledge of the genesis of the parasite, and to this end the author had made some experiments with very young specimens of Helix aliaria: these molluscs were subjected to the action of the swimming ciliated embryos; the latter, however, though constantly sticking to the snails, refused to penetrate their bodies. The living ciliated larvæ were next subjected to the action of certain drugs: alcohol, santonin, salt, &c. The embryos were found to be excessively sensitive to stimuli of all kinds. Thirteen cases of the disease were fully described. Post-mortem investigations have shown that the home of Bilharzia is the portal system, where the adult worms have been found in great numbers, including, however, but few females, and only a small proportion in sexual combination. The eggs accumulate within the chylopoietic branches of the portal vein, and also within certain systemic veins that anastomose with them. To the dispersion of the eggs nearly all the symptoms of the disease are due, and the intimate relation between the chylopoietic veins and the systemic veins supplying the genito-urinary passages is sufficient to explain why the kidneys, ureters, bladder, and rectum are all liable to become the seat of the disease. An outline of Sonsino's classification of the Bilharzia infarcts was given. The author considered the remarkable variations of the eggs of Bilharzia to have no pathological or clinical significance. The employment of medicated injections and "surgical treatment" were both condemned, and reliance was rather placed on good climatic conditions, general tonics, and other means, to aid the curative efforts of nature. Dr. Cobbold showed eleven specimens of the adult worm, six of the worm as it occurred in the human being and five in the ox. Dr. Sonsino had also sent him through the kindness of Sir Joseph Fayrer a specimen of Bilharzia crassa, which was a larger and stouter parasite, the eggs were different from B. hæmatobia, and had spines at both ends. He showed several other kinds of Bilharzia, some of very large size. Mounted preparations of a bladder which showed miliary infarcts in the left seminal vesicle were also exhibited. Some stones which had been removed by cystotomy had been sent to him by Dr. Kartulis; the eggs formed the nuclei of the calculi. Photographs and microscopic preparations illustrated the paper.—Dr. George Johnson said that the main point of contention was as to the effect of local treatment.—Dr. John Harley said that it was to be wished that we had completed the life history of the parasite, but he thought that no advance had been made. He referred to his original observations on the subject. He could not agree that improvement in the general health was necessary for the cure of the disease. Very healthy people took the disease, and large numbers of robust individuals suffered from it. Nephritic colic was sometimes observed as the result of the disease. Whereas no cure had been effected in Dr. Cobbold's cases, he had had one case under his care in which local treatment was attended with success. He spoke of the value of soluble drugs like iodide of potassium injected into the bladder; also of the use of the oil of the male fern. He had never recommended the use of perchloride of iron, and condemned anything like heroic treatment. His remarks were illustrated by reference to cases which had been under his care.—Dr. Cobbold, in reply, thought that cures of the disease might be mere delusions, for the parasite may exist for a long time without giving rise to symptoms. He was glad that there was so little divergence of opinion in regard to treatment. Reference was made to the observations of Mackie, in some of which the ova were found in the rectum and sigmoid flexure, but not in the bladder. The parasites did not enter the bladder through the urethra. The notion that the parasites were free in the bladder was an erroneous one. The "bedchamber" and principal seat of the parasites was the portal system, and Kartulis had counted no less than 300 specimens (and the number might be much greater) sexually combined in the portal vessels of one case.

Dr. Angel Money read a paper on the Experimental Production of Chorea and other results of Capillary Embolism. The experimental investigation of which this communication is the first contribution was begun in October, 1884. The animals used have been rabbits, guinea-pigs, cats, and dogs. The emboli found most suitable were arrowroot particles, granules of potato starch, and carmine. The particulate liquid was generally injected into the common carotid artery. Sometimes the injection was made towards the brain, but, as a rule, the liquid was injected towards the heart. It is exceedingly easy to produce embolism of the capillaries of the brain, but it is very difficult to get emboli into the capillaries of the upper part of the spinal cord without causing death by paralysis of respiration. The most important clinical observation which has come out of the experiments is the production of involuntary movements indistinguishable from those of chorea. These movements have not been accompanied by appreciable paralysis or spasm. The chorea of the animals experimented on never resulted from capillary embolism of the brain. In nearly every animal in which the brain was affected with capillary embolism some form of "uncontrollable" movement was present, allied, the author believes, in essential nature to chorea. The "chorea" of the animals experimented on was always the result of embolism of the capillaries of the spinal cord. The want of development of the pyramidal tracts in the animals under consideration possibly affords an explanation of the reason why chorea does not in them result from embolism of the brain proper. The author is of opinion that the reasons given for locating the lesion of most cases of chorea in the human subject in the brain are too powerful to be upset by experiments on animals so far removed from man as those experimented on by him. When the "chorea" of the animals experimented on was well marked, reflex action in the spinal cord was exaggerated. The suggestion is made that in the few cases of chorea in the human being where the reflexes are exaggerated, the spinal cord will be found to be the seat of the pathological condition. Rhythmical repetitions of one movement and also irregular succession of different movements have both been observed, so that experimental "chorea" both resembles and differs from the chorea of man and the ordinary chorea of dogs. Spinal paralysis has been observed as the result of the author's experiments, and also complete facial palsy. The respiration and cardiac action are variously affected by capillary embolism. The temperature appears to be always lowered, but it is difficult to eliminate the influence of the shock of the operation. Capillary embolism may give rise to any symptom of disease of the nervous system. As a rule, the capillary emboli gave rise to no pathological lesion recognisable by the microscope or naked eye. The view is supported that chorea is due to defective nutrition of the same kind as that which leads to paralysis, though in a less degree. This defective nutrition may be brought about by many causes, of which embolism is one. The relationship of chorea to involuntary movements generally was discussed. Suggestions were made for differentiating the varieties of chorea.—Dr. Hughlings Jackson thought the paper was one of great value. That irregular, involuntary movements of any kind had been produced by artificial embolism was a very important thing. That the movements were or were not like those of chorea in man was not the question of first importance, although one of great moment. We could in no circumstance expect to see abnormal movements in a dog's forelegs, like the elaborate movements of a child's arm in chorea; the dog was not capable of such movements. The fact that in human chorea the movements were very elaborate, was some evidence as to localisation—pointing to the morbid affection of some part of the nervous system "high up," where the nervous arrangements were very special and complex. Since 1864 Dr. Hughlings Jackson had held that the seats of the lesions in chorea were convolutions near the corpus striatum, at the same time, after Kirkes, suggesting that the lesion was often owing to plugging of small arteries; he had never undertaken to show that this process was the sole one productive of chorea. That some convolutions did represent movements was, since the experiments of Hitzig and Ferrier, certain. As the face was affected in chorea, it was clear that there was some lesion above the spinal cord; cases of hemichorea in which the face was affected were inexplicable on the view that the lesion was spinal only. Certainly cases of post-hemiplegic chorea and pre-hemiplegic chorea were inexplicable on that view; in these cases, indeed, cerebral lesions had been found (Weir Mitchell, Charcot, Raymond, and Demange). It might, however, be said that in ordinary chorea in man spinal lesions also were concerned; they had been found by Dickinson and Ross. Again, it had been proved by Legros, Chauveau, Carville, and Bert, that in a choreic dog the abnormal movements of its foreleg persist after section of the cord above the origin of the nerves for that limb. Dr. Hughlings Jackson had found the same. In the canine chorea of veterinarians the movements were rhythmical, and it did not follow that in this animal such comparatively simple movemements might not be capable of development from activity of spinal centres, whilst they might not be so in a higher animal, as in man much more elaborate movements were often seen. Albertoni, Franck, and Pitres affirmed that an epileptiform seizure started in a dog by faradaic irritation of some part of its motor cortical region, continued in spite of sudden removal of the part of the cortex excited. An objection often brought against the hypothesis of embolism and thrombosis was that these processes led to destruction of nervous elements. That was perfectly true; and it need not be said that from destroyed nerve tissue there could result no movements of any sort. But then it was equally true that with destructive lesions there sometimes occurred over-development of movements—e.g., post-hemiplegic chorea. It is certain, too, that epileptiform seizures occurred in some cases of local cerebral softening from thrombosis or embolism. A condition for repeated seizures was established. In these, and in most cases of chorea, everyone had two opposite motorial states to account for, some paralysis and some over-movement. Destruction of some nervous elements from embolism could only account for the paralysis in chorea; there must be on any hypothesis an over-activity of some other nervous elements to account for the co-existing over-movements. He reasserted that over-movements of some kind (post-hemiplegic chorea, athetosis, epileptiform seizures) do occur in cases where there are destructive cerebral lesions. Dr. Hughlings Jackson thought the researches of Dr. Dickinson (Med. Chir. Trans., vol. 59) went a long way towards proving the hypothesis of embolism and thrombosis as a cause of chorea. He said this with great respect, as Dr. Dickinson rejects that doctrine. Dr. Dickinson said the lesions in chorea were determined in position by the course of the arteries in the brain notably by the middle cerebral, which, as he stated, are the favourite routes of emboli. He wrote, "The first visible change would seem to be the injection or distension of the arteries, succeeded by extrusion of their contents to the irritation and injury of the surrounding tissues." Was not this like a description of embolism or thrombosis? He found also spots of sclerosis "degeneration of nervous elements;" the sclerosis was usually periarterial. Now, this sort of change, the sclerosis, a negative one, softening in miniature, could not cause movements of any kind. There must be another change, an opposite one, else there would not be the over-development of movements. Moreover, Tuckwell, Bastian, and Ross, had found plugging of arteries in some cases of chorea. Dr. Ross in his great work on Diseases of the Nervous System related a very important case, confirming Dr. Richardson's observations. Ross found plugging of anterior or antero-lateral arteries of the cord, and also necrotic spots in the corpora striata. Regardless of any hypothesis, Dr. Money's researches proved that in some way some involuntary movements are producible by embolism. It could scarcely be but that his work would be of great scientific and practical importance; it constituted a new starting point. Dr. Hughlings Jackson concluded by remarking that in chorea there was often a condition for embolism or thrombosis; that the movements were hemiplegic or double hemiplegic; that emboli most often did get into the middle cerebral artery which supplies the convolutions supposed to be morbidly affected in chorea, and that slight faradaic excitation of these convolutions did produce elaborate movements, although it was not yet proved that it set up a persistent condition for a quasi-spontaneous succession of different movements at different intervals as such as occurred in chorea.—Dr. Charlewood Turner contributed some observations from fatal cases of chorea in the child. Some large nervous cells taken from the third layer of cells at the fissure of Rolando were much swollen and distorted; these were large polar cells. The nuclei were obscured. All the cells of this layer were not affected. A paralytic condition of the motor nerve cells in this particular part of the brain, from which volitional impulses are transmitted to the muscles, might account for the phenomena of chorea. In chorea no properly arranged movements were possible. If the control of the highest centres were removed, then the emotional movements would be increased in activity; for it was probable that the movements of emotion were energised from other parts of the grey matter of the brain. Reference was made to the views of Dr. Hughlings Jackson on the alliances of incoördination with paralysis. Dr. Turner thought the embolic theory scarcely sufficed to explain the phenomena of chorea, for the effects of capillary embolism soon passed away. Where permanent destruction was caused as the result of embolism paralysis resulted.—Dr. Octavius Sturges spoke of the great value of the experimental investigation made by Dr. Money. He, however, thought there were clinical points in chorea which showed that chorea could not be due to structural lesions. A slight febrile attack or an acute specific fever, such as scarlatina or typhoid fever, would abolish chorea, and the chorea would not return so far as he knew on recovery from the acute specific fever. Then there were other points in the history of chorea which went against the embolic view. The sexes were so differently affected, and in a matter of race there was so much difference. Indians were but little affected. The movements observed in animals, though they were spoken of as chorea, did not appear to him to be of that nature. Again, emboli were absent in most cases of fatal chorea occurring in children. He questioned whether the movements observed by Dr. Angel Money ought to be called chorea.—Dr. **COBBOLD** drew attention to some observations made by Böllinger, Friedberger, and others of aneurysm in the horse, which was so frequent in horses more than seven years old. It was stated that 90 per cent. of such horses were affected with this "worm" aneurysm. The worm was called strongylus armatus. Various irregular nervous movements resulted from the introduction of these worms into the arterial circulation, into which they got from the aneurysms.—Dr. **JOHN HARLEY** said that he had shown that cryptopia could give rise to choreic movements. Narcein dissolved in glycerine and injected under the skin of small animals gave rise to lethargy and convulsions. The alkaloid was absorbed into the circulation and deposited in the tubules of the kidneys and produced a physical anuria which no doubt gave rise to the convulsions, which set in about three hours after the hypodermic injection. He asked whether there were any emboli in the kidneys in Dr. Money's experiments.—Dr. **BROADBENT** said that the paper required a great deal of careful reading, but it was plain that the whole investigation was one of immense value, and it opened the door to further investigations, which could not but be productive of great results. Speaking of human chorea, he thought age rather than race and sex was the most important factor. He had held that capillary embolism was one cause, but by no means the sole cause, of chorea. Dr. Money had shown that almost every symptom of nervous lesions could be caused by capillary embolism. The rhythmical movements in animals were not the equivalent of chorea in the child. Human chorea was distinctly a cerebral affection, as the cases of hemichorea also bore out. He had more than once seen hemichorea followed by paralysis and reappear as the palsy disappeared. He knew also that febrile affections caused chorea to disappear.—Dr. **ANGEL MONEY**, in reply, contended that he had not suggested that chorea was usually caused by embolism. His observations merely pointed to the conclusion that embolism was a probable cause in some cases. He considered that Dr. Sturges was not in harmony with clinical observation in believing that chorea was always due to one cause. Dr. Money's chief contention was that any symptom of disease of the nervous system could be caused by capillary embolism. Chorea was due to a defective nutrition of certain parts of the nervous system, and this defective nutrition might be brought about by many means, embolism among the number. He had stated in his paper that the reasons for locating the lesion in the brain in human chorea were irrefutable. In reply to Dr. Harley, he said that there were no emboli in the kidneys, and that the spontaneous movements came on immediately after the injection of the artificial emboli into the arterial circulation. He thanked Dr. Cobbold for the information given with regard to embolism in horses.

PATHOLOGICAL SOCIETY OF LONDON.

Varicella Gangrenosa.—Thrombosis of Veins from Gonorrhœa. Addison's Disease.—Atrophy of Adrenals.—Rodent Ulcer.—Secondary Glioma.—Calculus in both Ureters.

THE last ordinary meeting of the session was held on Tuesday, the 19th inst., Dr. J. S. Bristowe, F.R.S., President, in the chair. The subject of the relations of Addison's disease to the adrenal bodies was in the ascendant.

The report of the Morbid Growths Committee on Mr. Treves' cases of tumour of the soft palate was read by Mr. Shattock. The report stated that the first tumour was an alveolar sarcoma; the second tumour was a spheroidal-celled carcinoma, but not improbably it had commenced as an adenoma.

Dr. **PAYNE** read notes of a case of Varicella Gangrenosa, which occurred in a girl aged three years. An ulcerated eruption was seen on admission to the hospital, and varicella had been present a month before. At the autopsy there were signs of acute miliary tuberculosis; to his knowledge there was only one other post-mortem record, and this was by Dr. J. Abercombie; in this case tubercular disease, not so extensive, was also present. It might be a mere coincidence that tubercle and varicella gangrenosa should be associated, though it might possibly be a factor in the explanation of the occurrence of gangrene in such eruptions. He discussed the other possible relations of the two affections. The combination of the varicellar and tubercular poisoning, if not inducing the gangrene, might at all events have led to the fatal result of the two cases in question.—Mr. **BOWLBY** showed a drawing of a case of varicella gangrenosa made from the body of a male child aged ten months, who had had varicella fourteen days before he was first seen. There were altogether six gangrenous patches. The infant recovered and left the hospital; it died a day after in convulsions, but no necropsy could be obtained. A second case, that of a female child aged eight months, who had had doubtful varicella ten weeks before admission, was narrated. The vesicles became purulent and ulcerated, and some went on to a sloughy state. A fresh crop of vesicles came out whilst the patient was in hospital, but none of these went on to gangrene. The third case mentioned was that of a female infant aged eighteen months. The sores were much the same as in the other cases. No doubt a gangrenous condition might supervene on cutaneous eruptions which were not varicella, though they were vesicular, and possibly the second case was of this nature.—Dr. **RADCLIFFE CROCKER** had seen two fatal cases and some of an intermediate degree. The tubercular association of gangrenous ulceration was suggested by Dr. Barlow some time ago. In one of Dr. Crocker's fatal cases there was a strong tubercular history, and it was said that an elder brother died from tubercular peritonitis. In some cases of gangrenous eruption there was no distinct history of chicken-pox. The gangrenous condition did not always appear to come from the varicellar eruption itself, but in the skin which had not been the seat of the varicellar vesicles. There were, he thought, various grades of the affection; deep pustules sometimes formed and healed without any gangrene supervening. The gangrene sometimes appeared as the varicella was subsiding. In other cases, as in one of Mr. W. Haward's, the fourth day was the date of the onset of the gangrene. A septic change occurring in the secretion might explain some cases. Death from pyæmia was not unknown in connexion with these eruptions. Evidence of tubercle was not to be obtained in some of the cases. In his experience the eruption sometimes appeared to be benefited considerably by sulphocarbolate of soda administered internally.—Dr. **PAYNE**, in reply, had not been aware that Dr. Barlow had suggested that tubercle was an active agent in bringing about the gangrene of such cases as those in question, though he had some recollection of such a suggestion in connexion with vaccinia gangrenosa.

Mr. **BILTON POLLARD** showed a dissected specimen of the Pelvic Viscera and Veins of a case of Thrombosis consequent on Gonorrhœa. The patient was a woman aged nineteen, who had suffered from gonorrhœa for thirty-six days before death. The other symptoms present were pyrexia, the temperature ranging between 100° and 102°; some pain in the knee and fixation of the right hip-joint. The symptoms of disease of the hip-joint were at times equivocal. Death was due to embolism of the pulmonary arteries. The specimen showed thrombosis of the left common iliac vein, left internal iliac vein, and vaginal veins. There was no ulceration in the vagina. The cartilage of the femur and acetabulum of the right hip-joint was eroded, and the joint contained purulent material. No other joints were affected. Mr. Pollard thought the case remarkable in that so serious a set of conditions should complicate a case of gonorrhœa without giving rise to symptoms sufficient to call attention to the perilous state of the patient.

Dr. **SAUNDBY** showed the Spleen and Semilunar Ganglia of a case of Atrophy of the Suprarenal Capsules. The patient was a female aged eighteen. At the age of thirteen she was first seen, and it was noted that she had a somewhat Italian cast of countenance and complexion. She was treated afterwards for anæmia, amenorrhœa, and other disorders, but Addison's disease was not then suspected as the cause of her ailments. About August, 1884, there was pyrexia, and then the spleen was found to extend to the umbilicus, being much enlarged. An attack of faintness in January, 1885, was premonitory to a fatal seizure, from which she died comatose a few days later. All her life the urine had been dark and contained a large quantity of indican; a trace of hæmoglobin was found on one occasion. The heart was somewhat hypertrophied. Some pigment arranged in chains in the cortex of the kidneys was seen in sections of these organs. The adrenals were much atrophied; one weighed ten grains and the other eighteen grains. The spleen weighed sixty-six ounces. He referred to McMunn's spectroscopic researches, which seemed to lead to the inference that the function of the suprarenal bodies was to destroy the effete blood pigment. Other points of interest in the case were referred to. The father died at thirty-seven with an enlarged spleen and passed black urine all his life, and a brother had an enlarged spleen and many attacks of melanuria. Dr. Saundby commented on the three important elements of an enlargement of the spleen, of the dark-coloured urine, and of the occurrence of these symptoms in one of three members of the same family in which these symptoms coincided. In Greenhow's work mention was made of an enlargement of the spleen in two cases, but no stress was laid on it. Rosenstein, in the fifty-sixth volume of Virchow's *Archiv*, stated that he had found a large quantity of indican, ten times the normal quantity, in the urine of cases of Addison's disease.

Dr. Seymour Taylor read notes of some cases of Addison's Disease. The first was that of a female, single, aged thirty-five, who had all the signs well marked of Addison's disease. The pigmentation was typical. The viscera were healthy; the capsules were in the ordinary cheesy condition; the spleen was not enlarged. No tubercle was found in the other viscera; there was no pigment on the vagina; the labia minora were pigmented, especially about the nymphæ. Sections of the nymphæ were shown, which presented a great contrast between the external and internal surface. The pigment was seen in the rete mucosum and in the intercellular cement in the deeper layers of the epidermis. There were also many scattered pigment granules in the cutis vera. The second case presented the same changes in the nymphæ. Neither of the two women had been pregnant, and so the pigmentation could not have resulted from pressure on the veins.

Dr. Hadden read notes of a case of Atrophy of the Suprarenal Capsules with Addison's Disease. The patient was a single woman aged thirty. Vomiting was the first symptom, and began eight months before admission. The tongue and gums became pigmented. Pigmentation of the skin and mucous membranes was present on admission to hospital. The superficial reflexes were marked; the knee-jerk absent. Constant vomiting, attacks of fainting, headaches, and drowsiness were the main symptoms. Death took place suddenly three weeks after admission, just after an attack of vomiting. At the autopsy pigmentation of the vulva, skin around the anus, and upper end of the gullet were noticed. There was no tubercle anywhere; the adrenals were equal and distinctly small; the diminution was specially noticeable in thickness; the shape and colour were normal; the free edge was irregularly notched. The length of the left suprarenal was one inch and a half and its breadth three-quarters of an inch. The connective tissue around the capsules and sympathetic nerves was healthy. Microscopically, the suprarenal body showed much fibrous thickening of the investing capsule. There was a richly fibrous nucleated growth in the zona glomerulosa. Many of the cells were atrophied, and most were replaced by the newly formed tissue. In some parts the cell spaces were surrounded by dense fibrous tissue, and the spaces themselves were empty or contained atrophied cells. The nucleated growth passed inwards between the columns of cells in the zona fasciculata, separating them into islets. In many places the epithelial cells had undergone nuclear proliferation. The medulla was very scanty and difficult to distinguish. There were large areas of round cells, similar to those seen in the suprarenal body, in the semilunar ganglia. There was also a little granular pigment in the connective tissue. The nerve cells were probably healthy. The lymphatic glands were healthy. The state of the adrenals resulted from a chronic interstitial change, similar to that seen in cirrhosis of the liver. The lesion was identical with that of the thyroid gland in myxœdema. He regarded it as probable that no constant morbid change is essential for the production of either Addison's disease or myxœdema. The lesion must be a destructive one. Tizzoni's experiments were referred to as proving that in rabbits pigmentation of the skin occurred after destruction of the suprarenals. It was difficult to say that the change in the semilunar ganglia had any share in the production of the disease. Nevertheless, it was probable that the sympathetic nerves are at fault in Addison's disease. The rich supply of nerve fibres to the semilunar ganglia suggests that there is a relation between them and the sympathetic. Destructive disease of the adrenals must involve the nerve fibres which enter them. There may be a supplementary relation between the two, or the suprarenals may exert a controlling or moderating influence on the sympathetic.

Dr. Kingston Fowler showed the Adrenals and Semilunar Ganglia from a case of Addison's Disease, which occurred in a woman aged twenty-six who was under the care of Dr. Cayley at the Middlesex Hospital. The duration of the disease was three years. The illness began with an attack of vomiting, which lasted one week. These attacks became more frequent. The pigmentation was fairly marked. Syncope closed the scene. The adrenals were much atrophied. The right one was calcified and contained a caseous nodule in the centre. The left one was still more contracted. The nerves did not present any obvious changes. The case was doubtfully one of Addison's disease. He thought that Dr. Saundby's case was not an ordinary one of Addison's disease, and if there were any of the Addisonian element in it, it was probably mixed up with some other diathesis.

Dr. Samuel Wilks considered that the occurrence of atrophy of the adrenals supported Addison's original contention, which was to the effect that any destructive lesion could cause the symptoms of the disease. It was true that many cases of cancer, effusion of blood, and abscesses of the adrenals had been shown in which no symptoms of Addison's disease were present; but then he contended that both the adrenals were not destroyed by such conditions. The disease which could cause absolute destruction must be a slow integral change and probably of an inflammatory nature. In the early stages of such a change the organ might be enlarged, subsequently degeneration of a fibrous, calcareous or caseous or mixed kind would occur, whereby the organ might be totally destroyed. Such changes were to be seen in the liver and kidneys, which, however, being more vital organs, could not be totally destroyed without causing death. In the mamma and testis such changes could lead to the complete disappearance of the organs.—Dr. Hale White did not doubt that the ganglia in Dr. Hadden's case did not present an abnormal appearance. He thought we should not pay too much attention to the abnormal change. Addison's disease could occur without any change in the ganglia that could be recognised by histological examination.—Mr. Victor Horsley did not think the evidence supported the doctrine of disease of the sympathetic nerves as the cause of Addison's disease.—Dr. Bristowe thought the evidence so far adduced confirmed the original statement of Addison that the disease was caused by anything that destroys the adrenals completely. The view that Addison's disease was a tubercular disease of the capsules was not the correct one. He believed that the special function of the capsules was not a nervous one, though it was one which was essential to the well being of the economy. He conjectured that these bodies have certain special duties to perform in the way of removing waste products, or else as supplementary to other functions; and when these functions were disturbed, the organism suffered in some definite way which we clinically recognised as Addison's disease.—Dr. Wilks repeated that it was only possible to get total destruction of the bodies when there was an integral change in the organ itself. And he doubted whether any adventitious disease could cause complete destruction of both adrenals.—Dr. Saundby said the spleen was of a dark-purple colour, soft and pulpy. A large amount of pigment scattered amongst the cells was seen in microscopical sections. There was simply atrophy of the adrenals and no fibro-nucleated growth. He regarded it as a case of primary atrophy. The semilunar ganglia showed no special change. His own experience strongly supported the view which Dr. Hadden had advocated.

Dr. Thin gave an account of the sequel of a case of *Rodent Ulcer* fully described by him in 1879 in the Pathological Society's Transactions. The theory of the structure of rodent ulcer therein advocated was still maintained by him. The man since 1879 had been admitted into Middlesex

Hospital under the care of Mr. Morris, where he was in 1881. His death took place in September, 1884. The disease had spread from its original site on the scalp, when it was the size of a five-shilling-piece, until it had caused great destruction of the neck and side of the head. The distinctive and characteristic histological appearances were still to be observed in the borders of the large destructive ulcerating mass. The idea that a rodent ulcer becomes epitheliomatous was not borne out by Dr. Thin's case.

Mr. GEORGE LAWSON exhibited the drawings and post-mortem preparation of a case of Secondary Glioma. The patient, a little girl aged two years and two months, had the left eye removed by Mr. Lawson in December, 1883. In January, 1884, he removed the right eye, as it was distended with a gliomatous tumour, causing great pain. From both these operations the child rapidly recovered, and from each experienced great relief. In the following month, February, the child was admitted into the Middlesex Hospital with a recurrence of the tumour in the left orbit. The tumour continued to grow until it not only protruded beyond the orbit but covered the whole of one side of the face, overlapping the nose, the mouth, and the lower jaw. The child was kept free from pain by repeated small doses of morphia, and she took her food well. She died on August 3rd, 1884. There were no brain symptoms until a few days before her death, when she had several epileptic convulsions. At the post-mortem examination the whole of the left side of the face was occupied by a large tumour, slightly ulcerated in places. There were no secondary deposits in the organs of the chest or abdomen. In the fibres of the right deltoid muscle there was a lobulated mass, having the same appearance as the orbital growth. On removing the calvaria the dura mater was seen to be covered at irregular intervals with deposits of glioma varying in size from a pea to a penny. On cutting through the membranes, the convolutions were seen somewhat flattened and the meningeal veins distended. On removing the brain a tumour about the size of a small orange was seen occupying the pituitary fossa and neighbouring portions of the sphenoid bone, apparently having originally sprung from one or both optic foramina.

Mr. CULLINGWORTH (Manchester) showed specimens of Impaction of a Large Calculus in each Ureter, which were taken from a woman aged thirty who had had a swelling in the right side for two years; the symptoms dated back ten months, when a distinct attack of pain in the back and right side was first experienced, and during which attack there was much pus in the urine. This attack lasted two weeks, and similar attacks came on from time to time. Pyuria was observed to the extent of half the quantity of urine passed. An operation with a view of removing the diseased kidney or relieving the pyo-nephrosis was undertaken by the abdominal section. The right ureter was found to be obstructed immediately above its opening into the bladder. The ureter was opened, and a calculus was removed which was the size of a walnut. Three days afterwards symptoms of uræmia set in and the patient died. At the autopsy the left kidney was also found to be full of abscesses, the ureter was dilated and contained a calculus at its lower end. Had the existence of disease in both urinary tracts been suspected, he should not have operated in the way he had done. The pus came from the left kidney, for the right ureter was perfectly impervious as the result of the impaction of the stone.

The following card specimens were shown:—

Dr. Goodhart: (1) Viscera from a case of Phosphorus Poisoning; (2) Specimens of Leprosy of Hand and Larynx for Dr. Beaven Rake of Trinidad.

Dr. Burnet: Primary Melanotic Sarcoma of Liver.

Mr. Makins: Primary Sarcoma of Tibia.

Dr. Sharkey: (1) Impaction of a Coin in the Œsophagus for twenty months; (2) Aneurysm of Heart; (3) Multiple Epithelial Growths in the Œsophagus.

Mr. Poland: Sections of Epithelial Growths in the Viscera after Epithelioma of the Tongue.

Dr. Chaffey: (1) Multiple Sarcoma in a child; (2) Lymphosarcoma of Bladder.

Mr. Hutchinson, Jun.: Epitheliomata of Hand.

Mr. Arbuthnot Lane: (1) Bony Process from Humerus; (2) Displacement of Foot from Fracture of Bones of Leg; (3) Fracture of Sternum.

Dr. Gilbert Barling: (1) Round-celled Sarcoma of Peroneus Longus; (2) Alveolar Sarcoma of Triceps.

Dr. Hale White: (1) Perforating Tubercular Ulcer of Intestine; (2) Grain of Corn causing Typhlitis and Intestinal Strangulation.

Dr. C. Turner: Aneurysm of Aorta communicating with the Superior Vena Cava.

Mr. Shattock: Hernia into the Fossa Duodeno-jejunalis in a child.

Dr. Hebb: Melanotic Sarcoma of Spleen, &c.

Dr. Dawtrey Drewitt: Persistent Branchial Fissure in a child (living specimen).

Mr. F. B. Jessett: Lower Jaw removed by operation for Cancer (recent specimen).

Mr. A. E. Barker: Gangrene of Finger Ends, probably due to syphilitic arteritis.

Mr. Bland Sutton: Difficult Labour in a rickety monkey.

CLINICAL SOCIETY OF LONDON.

Report of the Committee on Spina Bifida.—Successful Œsophagotomy.—Raynaud's Disease.—Surgical Treatment of Tumour of the Bladder.

THE last meeting of the session of this Society was held on May 22nd, Mr. Thomas Bryant, F.R.C.S., President, in the chair.

The report of the Committee on Spina Bifida was read by Mr. R. W. PARKER. The subject was divided into two parts: (1) the pathological anatomy of spina bifida; (2) its treatment.

1. *Pathological Anatomy.*—The term "spina bifida" was used to define certain congenital malformations of the vertebral canal with protrusion of some of its contents in the form of a fluid tumour. With very rare exceptions the malformation affected the neural arches of the vertebræ, and the tumour projected posteriorly; in rare cases, however, the bodies of the vertebræ were involved, the tumour in such cases protruded anteriorly into the thorax, abdomen, or pelvis between the lateral halves of the bodies affected. The museum specimens were discussed under the following headings:—(1) Position of tumour; (2) size and configuration of the sac; (3) coverings of sac; (4) disposition of the meninges within the tumour; (5) size and configuration of the deficiency in the neural arches; (6) disposition of the spinal cord and nerves; (7) unusual variations; (8) the process of cure. The result tended to show that the specimens fell under three divisions:—(1) Protrusion of membranes only (simple meningocele); (2) protrusion of membranes together with the spinal cord and its appertaining nerves (meningo-myelocele); and (3) protrusion of the membranes together with the spinal cord, the central canal of which was dilated so as to form the sac cavity, the innermost lining being constituted by the expanded and atrophied substance of the cord (syringo-myelocele). The committee stated that the meningo-myelocele was by far the most frequent, while simple meningocele came next, and syringo-myelocele last. As a typical example of the common kind, a specimen now in the College of Surgeons was quoted. This was a case of lumbo-sacral spina bifida, the size of a Tangerine orange, sessile, but constricted slightly at the point of attachment. The tumour presented normal skin for a short distance round its base, but the central portion consisted of a thin translucent membrane; along its vertical axis the tumour was slightly furrowed, this furrow corresponding to the attachment of the cord to the inner surface of the sac wall. The spinal cord ran almost horizontally across the upper part of the sac, and then became incorporated with the sac wall, from which also the lowest nerves arose; they then passed across the sac to gain the intervertebral foramina, from which they issued normally. The anterior and posterior roots of the nerves were separated from each other by an exaggerated ligamentum denticulatum. A careful dissection was often necessary in order to distinguish simple meningocele from syringo-myelocele. Mention was made of several variations; among these the division of the sac into smaller loculi, and the occurrence of bony outgrowths across the vertebral canal button-holing the spinal cord, were the most remarkable. Careful microscopic examination of the sac wall in a typical case of meningo-myelocele had disclosed the continuation of the central nervous system within its median vertical portion, the integrity of the central canal of the cord within this part, and the absence of true skin over it. It further displayed the absence of any meningeal cavities behind the incorporated portion of the spinal cord; it was clear, therefore

in the first place, that the nerve roots, which traverse the sac, arise from this intramural portion of the central nervous system, and that all expressions of descriptive pathological anatomy which imply a *distribution of the nerves to the sac wall* are a reversal of facts. Even more important than this, the histology of the sac wall in a typical case, by demonstrating the integrity of the central canal of the included portion of the cord, showed beyond dispute that the neural furrow does not remain unclosed in spina bifida, nor after having been closed is it subsequently distended by dropsy and ruptured. The absence of true skin from the central portion of the sac wall was next adverted to. The membrane implied that the mesoblastic basis of the true skin, and the structures lying in subjacent connexion with it, had not been developed. The presence of the cord in the sac wall offered no difficulty of explanation when its epiblastic origin was remembered. The theory therefore which best explained the pathological anatomy of spina bifida was that which assumed a primary defect of development of the mesoblast from which the structures closing in the vertebral furrow were developed.

2. *Clinical Course and Treatment of Spina Bifida.*--In order to form a correct estimate of the value of treatment by the injection of Dr. Morton's iodo-glycerine solution, the committee had endeavoured to ascertain as far as possible the natural history of the deformity when untreated, and had prepared tables of cases treated in various manners for purposes of comparison. As regarded the natural history of the deformity, the Registrar-General's report for 1882 showed 649 deaths from spina bifida in England and Wales, of which 612 died under one year of age. The committee held that, though a certain number of these deaths were due to local causes—rupture of the sac, draining away of the cerebro-spinal fluid, and subsequent septic meningitis—yet in a large proportion of cases death ensued from the marasmus and general defective nutrition so frequently associated with the deformity, and which could not be remedied by any local or other treatment. The tables next dealt with treatment by injection with simple solutions of iodine, and showed a considerable amount of success. Then ligature of the sac was considered, and here again good results seemed to have been obtained. Excision likewise had a considerable proportion of success. The plan of repeated tapping and pressure gave the least successful results of any. The injection of Morton's fluid, according to the committee's tables, showed a percentage success of between fifty and sixty. The high mortality was thought to be largely due to the treatment having been adopted in unsuitable cases on account of its simplicity and supposed safety. In spite of the favourable results of ligature and excision of the tumour as shown in the tables, the committee felt themselves compelled to report against these methods of treatment. There was reason to think that the published cases might be misleading, owing to some cases of failures not being recorded, while all the successes, being regarded as surgical triumphs, were almost certain to have been recorded. Moreover, it seemed probable that a careful selection of cases had been made. The committee therefore advocated the plan of treatment by injection, and preferably by the injection of Morton's fluid. The report was signed by Mr. Howard Marsh, Mr. A. Pearce Gould, Mr. H. H. Clutton, and Mr. R. W. Parker.

A large collection of drawings, illustrating the usual forms, as well as the most noticeable variations, of spina bifida was exhibited, and the committee especially acknowledged the help which Mr. Shattock had rendered them.

The President said that the report contained a collection of information which could be found nowhere else. He ventured to say that many previous notions would have to be given up when the report became public property.

Mr. George Lawson read the report of a case in which he had performed successfully Œsophagotomy for the removal of a plate with three false teeth, which had been accidentally swallowed and was impacted in the œsophagus. The patient, a milkwoman, aged fifty-five, was admitted into Middlesex Hospital on Jan. 14th, 1885, having about half an hour previously swallowed a vulcanite plate with three artificial teeth. Mr. Lawson endeavoured, without success, to remove the foreign body with a pair of long curved œsophagus forceps. An incision about three inches in length along the lower prominent border of the sterno-mastoid muscle was made; the sterno-mastoid and the omo-hyoid with the carotid sheath were drawn outwards, whilst his colleague, Mr. Gould, drew the trachea in the opposite direction, and with his fingers on the right side of the neck pressed the œsophagus towards the incision. The œsophagus was now visible, and the plate could be easily felt with the fingers. A vertical incision was then made in the œsophagus on to the plate, and after some difficulty the plate was removed by dividing it with the bone forceps. No sutures were put into the œsophagus. The superficial wound was then partially closed with sutures and covered with boracic lint charpie, over which was placed carbolic gauze and oil-silk. The patient was ordered to be fed with nutrient enemas and Slinger's nutrient meat suppositories. On the following morning the wound was dressed, and there was found to be a very free discharge of saliva and mucus through it. On the 19th, the fifth day after the operation, some redness appeared around the wound, and this increased for two or three days. This was followed by an offensive discharge, with some sloughs of cellular tissue. On the 20th, the seventh day after the operation, as much of the fluid taken by the mouth continued to escape by the wound, Mr. Lawson introduced an œsophagus tube with a funnel-shaped extremity, which projected about six inches from the mouth. This was kept in, and through it the patient was regularly fed. The tube was worn until February 8th, when, as the wound in the œsophagus was apparently closed, it was removed. During this period the tube was changed about every four or five days for purposes of cleanliness. On February 22nd the external wound was healed, and the patient since then has been able to take her food as usual. She has left the hospital, and is now quite well.—Mr. Lediard (Carlisle) contributed some notes on a case of œsophagotomy. The patient was admitted into the Cumberland Infirmary with a tooth-plate in the œsophagus, which had become dislodged from the mouth during sleep some twenty-four hours previously. There was pain on swallowing and emphysema of the neck. Various attempts prior and subsequent to admission failed to remove the plate, which was believed to rest somewhere behind the thyroid cartilage. Œsophagotomy was performed, but nothing was found in the pharynx or cervical portion of the œsophagus; it was believed that during manipulation on the table the plate may have been unconsciously moved from its resting-place, as the mucous membrane of the œsophagus behind the cricoid cartilage was somewhat bruised. The wound healed well. The plate was passed per anum on the nineteenth day, and the patient went home quite well, having been in hospital a month. The plate measured 1½ in. by ¾ in., and had sharp points and a hook at one end.—Mr. T. Bryant said that no doubt the employment of the tube was a useful form of practice, but he thought that soft rubber tubes, like those used by Mr. Charters Symonds, would be an improvement on the hard tubes. Dr. Lediard's case taught us that we should not be in too great a hurry to interfere in such cases. He knew of the case of a man who passed a large plate with teeth eight days after the plate was swallowed. Sutures should not be put into the œsophagus where there was ulceration.

Dr. Colcott Fox read notes on two cases of Raynaud's Disease. A woman, aged forty-one, of extremely nervous temperament, dated the commencement of the disorder from ten years back, but though this was the period when her attention was attracted by pain, it is probable that she suffered from slight attacks for some years previously. In the earlier stages all her fingers continually went "like white wax." This condition of recurrent local syncope gradually gave place to local asphyxia, and the feet became involved. The fingers gradually lapsed into a state of chronic asphyxia, which was intensified by frequent attacks of more severity, often leading to "blood blisters and ulceration." The nutrition of the phalanges has suffered greatly, so that her hands are crippled, the fingers are fusiform in shape, livid, shiny, and withered, the nails variously distorted, and the end phalanges much atrophied and almost immovable. The nose and ears are affected to some extent on exposure. Cold and nerve shocks are ready exciting influences. The second case, that of a man aged fifty-one, was of considerable interest, from the fact that, like one of Raynaud's cases, he suffered from diabetes. His hands were not deformed, but he had suffered for several years from "dead fingers." He sought Dr. Fox's advice for symmetrical gangrenous patches on the skin, which recurred, and later for an attack of asphyxia of one great toe and lower third of the inner side of the leg, and then it was found that he had been attacked in a similar manner, though more severely, in the other toe, and on another occasion "blood blisters" had formed beneath the end of his toes. Dr. Fox concluded his paper by giving a reference to some cases which have been recorded as scleroderma of the extremities. A woman with the latter disease was shown to illustrate the difference between it and Raynaud's symmetrical gangrene of the extremities.—Dr. **BERNARD O'CONNOR** referred to a case of symmetrical gangrene associated with intra-thoracic tumour which he had shown during the last session at the Pathological Society.—Mr. **HARRISON CRIPPS** was inclined to look upon the gangrene of the second case as due to the diabetes. He considered that the pathology of Raynaud's disease might be regarded as midway between that of a frost-bite which was due to local influences and that of senile gangrene, which was almost solely due to constitutional causes. Mention was made of a severe case of widely distributed gangrene; the gangrene affected those parts which were at the very periphery of the circulation.—Dr. **BARLOW** asked to be allowed to supplement his former paper published in the Transactions of the Society by an account of some subsequent observations of the cases therein recorded. He wished to say something of the important question of therapeutics. He spoke of the use of the constant current in two of the cases. The first case alluded to was that of the man aged forty-two, who first suffered from severe paroxysmal attacks which had gradually become chronic, in which the chief symptoms were pain, coldness, and blueness, followed by tingling. In the autumn of 1883 the treatment was begun. At first one pole down the spine and another on the extremity was the method used as advocated by Raynaud. Later on he used with better results two poles to the asphyxiating part. This was done with the aid of a bath of salt water or by "painting" the part with both poles, which was the simplest and best method. Twenty minutes a day was the time devoted to the treatment, which lasted from August to April, and was followed by most decided benefit, which had been permanent. Shampooing was also advised to be continued, and had been practised before the galvanism, with but little success however. Acute paroxysmal attacks he had also treated by means of the constant current. In August, 1884, he had under his care the case of a girl in whom the asphyxia appeared in the hands and feet, lasted about two hours, and generally came on about 9 A.M. or 5 P.M. There was intense pain, and the feet became quite black to about two inches above the ankle. Drawings of this condition were exhibited. This case, which was treated by repeatedly reversing the current, of the strength of about twenty cells, gave decided results, for during some of the attacks but one foot was treated, and this foot recovered whilst the other remained black as long as in an ordinary attack. Nitrite of amyl was used, but had no influence on the local asphyxia, although the physiological effects were produced. In some cases the use of the constant current locally at the commencement of an attack effectually prevented its development. He suggested that the constant current and vigorous shampooing would prove beneficial in Dr. Fox's first case. He thought the action of the galvanism was simply that of a local stimulus to the circulation.—Dr. **COLCOTT FOX**, in reply, said in his cases the most severe pain was experienced as the attack was passing off. He did not think the gangrene was due to the diabetes in his second case, which had all the characters of Raynaud's disease.

Mr. **WILLIAM ANDERSON** read notes of a case of Papilloma of the Bladder. The patient, aged fifty-three, was admitted into St. Thomas's Hospital on August 9th, 1884, with symptoms of vesical tumour of twelve years' duration. The first indication of the disease was an attack of apparently spontaneous hæmaturia in 1872. After the third attack the relapses appeared about four times yearly. The hæmorrhage was for a long time the only symptom, and nothing confirmatory could be educed by investigation of the urine or by vesical examination, except a peculiarly localised tenderness in the region of the trigone on contact with a sound. In June, 1884, a vesical catarrh became superadded. On Aug. 14th the *boutonnière* operation was performed, and a soft flocculent growth was found occupying the region of the trigone, extending upwards for about one inch and a half from the internal meatus, and one inch on either side of the median line. The mass was removed by means of forceps, some hæmorrhage resulting. The progress of the case was satisfactory, and on Sept. 10th, twenty-seven days after the operation, the patient was discharged well, except for a minute perineal fistula and a trace of blood in the urine. He is still in good health. The points of interest in the case were the extremely slow evolution of the tumour, twelve years, and the absence of conclusive evidence of the nature of the disease before the digital exploration of the bladder. Under such circumstances any operation determined upon could only be exploratory in the first instance, but the patient probably owed his life to the surgical intervention. Theoretically it seems probable that relapse would take place sooner or later in a rather large proportion of cases considering the difficulty that must frequently arise in making sure of the complete removal of every portion of the tumour. Bearing in mind also the very slow development of the primary growth in many instances, it might be expected that the signs of recurrence would occasionally be deferred until a very late period. Out of thirty-eight cases in which the nature of the tumour was sufficiently indicated in the report, there are four instances of undoubted and four of probable recurrence, all within a year of the operation. Complete relief is noted in one case for five years up to the date of record; in one for four years; in five for two years; and in four for periods ranging between twelve and fifteen months. In nineteen other cases no signs of recurrence had appeared at the time of the report, but the observations had been limited to a term of less than twelve months. There are thus as yet only eleven cases out of thirty-eight in which is registered an immunity of one year and over, against eight cases in which relapse is noted as certain or probable.

Mr. **BERNARD PITTS** read notes of a case of Tumour of the Bladder. The patient, aged forty-three, was admitted to St. Thomas's Hospital on September 10th, 1884, suffering from some hæmorrhage from the bladder. He had a blanched and debilitated appearance, and stated that he had been passing blood with his urine for more than two years, and that of late the hæmorrhage had considerably increased in quantity. He had never suffered pain, but had been troubled of late with irritability of the bladder. The urine was offensive, deep red in colour, and contained much clot; microscopical examination showed traces of villi. A perineal exploratory operation was performed on Sept. 15th, and a large pedunculated tumour discovered on the right side, just below the orifice of the ureter. With serrated forceps portions of the softer part of the growth were broken off, but the wire of a strong écraseur was subsequently passed round the pedicle and the whole of the tumour thus removed. The pedicle was about one inch long, and of the thickness of a finger. A soft tube was left in the wound, and removed on the fourth day. The patient made a quick recovery, and on October 7th was passing all his urine the right way. He rapidly regained health, and has had no trace of further hæmorrhage up to the present time. The tumour, on microscopical examination, proved to be a fimbriated papilloma with the usual structure. Some remarks were made on the diagnosis of the case, which depended rather on the prominence of the hæmorrhage as a symptom than on the microscopical evidences in the urine. The probe-pointed gorget was tried but abandoned, and the dilatation of the neck of the bladder was made with an ordinary director as a guide for the finger. There was a good deal of bleeding during the manipulation with the forceps, and the operation would have been less prolonged if the écraseur had been used in the first instance. It was not, however, until portions of the growth had been removed that the extent of the pedicle was discovered. The prognosis in this case was a very favourable one, for by using the écraseur the pedicle was cut off quite close to the wall of the bladder, and the rest of the vesical surface was examined by the finger and found to be healthy.—Mr. R. J. **GODLEE** considered that it was justifiable to make an incision into the bladder in cases which must inevitably be fatal. He referred to such cases in which it was impossible to remove the whole growth, but the patient's life might be prolonged, and certainly their existence rendered more tolerable, by incision into the bladder with removal of as much of the malignant growth as was possible with safety. Professor **HUMPHRY** said, on invitation from the President, that his was the first case of exploration of the bladder that had been done in this country. He had heard that the boy was quite well two or three years after the operation. He had been much struck by the long period of cessation of hæmorrhage in cases of villous tumour of the bladder. He first became aware of this fact by a study of the specimens in the museum of St. George's Hospital. He could not interpret this fact. The multiple character of the growths was one reason why they were so difficult to cure radically.

Mr. T. **BRYANT**, in bringing the business of the session to a close, said that he considered that the great function of the Society was to discuss papers; and he thought it should not encourage the reading of long papers. The encouragement of full debating powers was all-important in a clinical society, for such debates served to show some fallacy or to elucidate new facts in the most telling manner.

The following specimens were exhibited:—

Mr. Jessett: A case of Plastic Operation for Epithelioma of Lower Lip.

Dr. Colcott Fox: Two cases of Raynaud's Disease.

Dr. de Havilland Hall: A case of (?) Rheumatoid Arthritis, with nodules on the head and clavicle, probably of syphilitic origin.

Dr. Hale White and Mr. Arbuthnot Lane: A patient with a Cervical Rib.

Dr. A. T. Myers: A case of Raynaud's Disease in a boy aged twelve years, in which the ears were affected, and there was Paroxysmal Hæmoglobinuria. The blood showed signs of disintegration of its red discs.

Dr. Stephen Mackenzie: A Remarkable Case of Nævoid Condition of Scalp, having a configuration very like the cerebral convolutions.

Mr. R. W. Parker: Sacro-coccygeal Meningocele.

Mr. Arbuthnot Lane: Fracture of both Superior Cornua of the Thyroid Cartilage.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

AT a meeting of this Society on March 6th,

Mr. **BRUCE CLARKE** showed a boy aged nine, who was convalescent from a Compound Starred Fracture of the Occipital Bone, together with a Linear Fracture of the Frontal Bone. Tetanus with emprosthotonos set in on the thirteenth day after the accident. Also a case of Union after Fracture of the Lower Epiphysis of the Humerus in a boy, and a successful case of operation for Strangulated Inguinal Hernia.

Dr. **THOROWGOOD** read notes of two cases of Peritoneal Abscess following attacks of enteric fever. Case 1 was that of a little girl aged ten years, seen with Dr. Eyre of Forest-hill. The patient's illness commenced about Dec. 2nd with symptoms of true peritonitis; typhoid spots subsequently appeared. Two days after return of temperature to normal a swelling appeared at the umbilicus, which, on being punctured, discharged a large quantity of foul-smelling pus. A drainage-tube was inserted, and beef-tea, tonics, and brandy were given, and, notwithstanding congestion of the base of the right lung, the wound was quite healed by Jan. 17th, and the patient made a good recovery. Case 2 was that of a woman aged thirty, who was admitted into the West London Hospital on Oct. 14th, 1884. The attack commenced on Sept. 27th with rigors, and was followed by vomiting and diarrhœa. Temperature on admission 100·4°; pulse 132. The patient lay on her back with her knees drawn up, and complained of much abdominal pain. On Oct. 17th the right side of the abdomen was very tender, and two typhoid spots were observed. Pea-soup motions; diarrhœa moderate. On the 21st an abscess was opened underneath the jaw, and healthy pus flowed out. The patient seemed to be doing well. On Nov. 2nd her temperature was 101°, pulse 132. A troublesome cough came on suddenly, followed by a copious expectoration of pus mixed with blood. There was dulness, with crepitant râles, at right base. On Nov. 6th the abdomen was noticed to be swollen and distinct fluctuation was felt; abundant purulent expectoration; pulse 150, temperature 101·5°; fluctuation in abdomen became scarcely perceptible after the copious expectoration of pus. Exhaustion set in, and, notwithstanding stimulating treatment and diet, the patient died on Jan. 26th. The source of the pus was the question which presented itself in this case. Suppuration of mediastinal glands was suggested, but there had been no difficulty in swallowing nor any noticeable dulness about either posterior or anterior mediastinum. The fluid in the peritoneal cavity appeared thick and similar to that expectorated. This, with the persistent crepitant râles at the extreme base of the right lung, gave support to the opinion that the pus came from an abscess below the diaphragm. The patient's previous health had been excellent. Nothing was noticed in relation to the liver. The post-mortem examination by Mr. Percy Dunn showed that a large abscess had formed in a sac quite apart and shut off from the intestines on the right side, and had worked its way upwards, perforating the diaphragm on both sides, ultimately finding its way into the bronchial tubes.—Dr. **TRAVERS** thought that in the absence of internal symptoms the diagnosis of typhoid fever on the strength of one spot was hazardous.—Dr. **BENNETT** said that though he had seen many undoubted cases of typhoid without spots, he had never seen a case where the spots did not class it as one of typhoid.—Dr. **THOROWGOOD** said the spot in his case was a typical one, and appeared about the time when the eruption was to be expected (second week); at the same time he was not prepared to say positively what the case was, nor was he enabled to say what the starting-point of the abscess was. No evidence of cicatrisation was found in the intestines.

Dr. **HERRINGHAM** showed a child aged three years and a half, in whom Hemiplegia had come on fourteen months ago. There was at that time palsy of the left arm and leg, and of the lower facial muscles of the left side, with almost complete palsy of the third nerve on the opposite side. Rhythmical tremors of the left side, increased by exertion, began even before the palsy was noticed, and continued ever since. The right third nerve had now almost recovered, but contraction and rigidity had set in on the left side, and were increasing. The child was in good health, and growing fast; no loss of mental power; never any optic neuritis; nor any history of syphilis or rheumatism. Heart normal. Iodide of potassium, arsenic, and tonics had had no effect. The diagnosis was a lesion in the right crus cerebri.—Dr. **BENNETT** said he saw this case some months ago, and was one of those who diagnosed the case as one of chorea. He did so again to-night, and his prognosis was favourable.—Dr. **THOROWGOOD** said that all along his opinion had been in favour of a slight hæmorrhage into the right crus, probably from thrombosis.—Mr. **LAWRANCE**, the President, said the movements seemed rather convulsive than choreic in nature.—Mr. **THOMPSON** asked whether the gentlemen who diagnosed the case as one of chorea were aware that complete hemiplegia existed on the right side, and that no improvement had taken place.—Dr. **HERRINGHAM** said, in reply, that no one who had watched the case had ever thought it to be chorea, nor could he conceive of anyone doing so, unless they understood by chorea "anything that shakes"; here the movements were rhythmic, in chorea they are distinctly not so; again, in no case of chorea of which he had heard had paralysis of the eye, or rigidity, or paralysis without wasting, occurred as here. As to the possibility of the presence of a tumour, he thought the lapse of a year had put it out of the question, as the tendency of cerebral tumours was to a fatal result. Eyesight had been normal all along; and there was no trace of heart mischief.

HARVEIAN SOCIETY OF LONDON.

AT the meeting on May 21st, the President, Dr. T. Morton, in the chair,

Dr. F. H. **CHAMPNEYS** read a paper on Certain Points in the Diagnosis of Cervical Stenosis. The author described briefly the anatomy and physiology of the cervix uteri; its cavity, its orifices, its secretion. As regards the os internum, it was pointed out that this orifice really belongs to the uterine body, and reasons were given for thinking that its size is variable in the same individual, and that it is not rigid, but undergoes spontaneous dilatation, being under the dominion of uterine polarity. He then discussed the diagnosis of stenosis, and showed that no certain inference could be drawn from difficulty in introducing the sound, because it could not be guaranteed that the sound was passed exactly in the calibre of the canal (though this could be assured in the case of the os externum), and because it might catch in a fold of mucous membrane. The diagnosis could, however, be made if difficulty in withdrawing the sound were experienced, because the instrument then travels of necessity in the right path. The paper concluded with notes of sixteen cases of cervical stenosis observed at St. George's Hospital.—The President, Dr. John Phillips, and Dr. A. Routh took part in the discussion. In answer to questions from various speakers, Dr. **CHAMPNEYS** expressed his disapproval of the operation for incision of the os internum on the grounds of the risk to life which it involved. Vaginal examinations of virgins should be avoided as a rule. Nevertheless where necessity demanded an examination, the fact of virginity should not be allowed to stand as an obstacle to the patient's chance of recovery. This should specially be borne in mind in connexion with dysmenorrhœa, which in the author's opinion often laid the foundation of serious pelvic disease.

Mr. H. E. **Juler** offered some remarks on the Use of the Ophthalmoscope in the Practice of Medicine. Dealing first with the methods of ophthalmoscopic investigation, the author described the three modes of examination known as the direct method, the indirect method, and the shadow test. Among the ocular affections which constantly recurred in ordinary medical practice, and for the safe diagnosis of which the ophthalmoscope was necessary, Mr. Juler referred to albuminuric retinitis, optic neuritis, retinal hæmorrhage, atrophy, tobacco amaurosis, and faulty refraction. The subject was illustrated by numerous diagrams, and by the use of artificial models of the eye. The more recent forms of ophthalmoscope were also exhibited, and their use practically demonstrated.—Dr. **Sansom** referred to the use of the ophthalmoscope in children's practice. With a little care and patience it was possible to examine the eyes of most, if not of all, children. Great assistance in matters of diagnosis could thus be obtained. Thanks to this help, he had frequently been able to recognise the existence of hypermetropia, of cerebral tumour, and of renal disease. The extended employment of the ophthalmoscope could not be too warmly advocated.—Dr. Alderson, Dr. Sydney Phillips, and Dr. Culver James also took part in the discussion.

The next meeting of the Society was announced for October 15th, 1885.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

At a meeting of this Society on April 8th, Norman Chevers, M.D., C.I.E., President, in the chair,

Dr. G. B. **Longstaff** read a paper on the Seasonal Prevalence of Continued Fevers in London. The author referred to the well-known decrease in the mortality from "fever" in recent years. This decrease, he stated, was mainly under the heads of typhus and simple continued fever; the mortality from enteric fever in London had remained comparatively stationary for the last ten years. Since 1869 no fewer than 4374 deaths had been attributed to simple continued fever in London. Following the method of Messrs. Buchan and Mitchell, the author had constructed a diagram showing the seasonal prevalence of the three forms of fever in London. The data made use of were the admissions to the London Fever Hospital, the admissions to the hospitals of the Metropolitan Asylums Board, and the weekly deaths in London since 1869. The results obtained from these various sources were in the main concordant. Enteric fever yielded a well-marked curve; the disease was least prevalent in late spring and early summer, most prevalent in the autumn. The curve of scarlatina was very similar to that of enteric fever. The small numbers available in the case of typhus did not give such well-marked curves, but such as they were, they were very different from those of enteric fever. The mortality and the admissions to hospital from typhus were at a minimum in July, August, or September; from this minimum they increased to an autumn maximum in October, or more usually in November; they were generally excessive throughout the winter; and another maximum, commonly higher than that in the autumn, occurred in January or February. The fall might be sudden in March, or more gradual, and as late as May. Simple continued fever appeared to be even less influenced by season than typhus; the imperfect curve yielded by it, contrary to expectation, showed no autumn maximum like that of enteric fever. Like typhus, simple continued fever showed a maximum in January or February and a minimum in August or September. The author of the paper considered that the deaths still so frequently assigned to simple continued fever were really due to some other cause, and suggested general tuberculosis, septicæmia, and pneumonia. The figures brought forward showed that the hospitals of the Metropolitan Asylums Board dealt with an increasing proportion of the cases of infectious disease in London; but this increase was steadiest and most marked in the case of scarlatina. In 1884 the proportion of deaths in the hospitals of the Board to the total deaths of the metropolis was 11 per cent. for enteric fever, 19 per cent. for typhus, and 16 per cent. for scarlatina.

Dr. **Thorne Thorne** exhibited some Plans of Isolation Hospitals which had just been issued by the authority of the Local Government Board, and which are designed to meet the requirements of small and sparsely populated districts in such a manner as to secure the best available separation, both of diseases and sexes, without the need for erecting separate pavilions. One of the plans showed how, under one roof, four beds might be placed so as to secure this end. Special arrangements were also made by which nurses could be provided with bedrooms in the same building without any chance of their apartments becoming infected with ward air. This plan is eminently adapted for securing to small towns of some 4000 inhabitants or less, or to public institutions, the maximum accommodation at the smallest cost. The other plan provided twelve beds instead of four, all under the same roof, but having no aerial communication with each other. The pavilion is not only adapted to towns of some 10,000 inhabitants, but it should always be provided as one of the pavilions where two or more are to be erected, its advantages being considerable where only one or two cases of a disease are under treatment, and also for the purposes of isolating doubtful or special cases.

CAMBRIDGE MEDICAL SOCIETY.

At a meeting of this Society held on April 10th,

Dr. **Grove** (St. Ives) related a case of Recovery after Severe Injury to the Head with Symptoms of Fractured Base. He was summoned at 6.30, on November 3rd, to the wife of a farmer who had met with an accident. She was forty years old, and was always healthy and temperate. She had returned home an hour previously from marketing, and had driven the pony carriage round to the yard, but fell in getting out. She was found with her head lying on the stone step in a pool of blood, which was running out of the right ear; she was insensible, and vomited soon after being removed into the house. When seen she was almost unconscious, but answered in monosyllables when spoken to loudly. The right meatus was filled with blood, which trickled out. She was placed in bed and ice applied to the head. There was no sign of injury to the scalp, the pupils answered sluggishly to light, and the pulse was slow, about 60. The next day she was more conscious, her face was flushed, and the pulse 84; she had vomited several times during the night. The right side of the face was swollen and bruised, and she complained of pain in the head; blood mixed with serum was flowing from the ear. The head was shaved, ice applied, and five grains of calomel were given. The third day she was better, slept more quietly, pulse 96, bowels relieved. On the fourth day, on lifting the eyelid of the right eye, blood was seen freely effused under the conjunctiva, and the day after there was evidently some paralysis of the right side of the face, with diplopia and indistinct vision with right eye, loss of sensation on that side of the face, and complete deafness with the right ear; any movement of the head caused great pain. She was fed on milk for about a month, and the bowels kept well open. The improvement was gradual, and in six weeks she was able to walk into another room. Her condition about four months after the accident was as follows: she is quite deaf with the right ear; the taste is impaired on the right side of the tongue; and the sensation on the right side of the head and face is diminished; the sight also of the right eye is not so good as the left, but there is no diplopia now. Dr. Grove was of opinion that the injury was caused by a direct blow in front of the right ear. The subsequent symptoms were very grave; the severe hæmorrhage from the internal ear and the paralysis, indicating injury to the fifth and seventh nerves, pointed to fracture, probably, through the petrous portion of the temporal bone.

Dr. **Earle** (Melbourn) exhibited the Temporal Bone of a Suicide with Bullet Wounds. In February, 1884, he was sent for to see a man who was said to have committed suicide, and he found that he had shot himself in the right ear. The external ear was slightly swollen, and there was some hæmorrhage, but besides this there was little to be noticed. A bullet could be felt with the probe, deep in the ear, but could not be extracted. He was then insensible, but he partly regained consciousness during the next few days. On the seventh day there was copious discharge from the left eye, and on the tenth day the right eye also became involved, and there was ulceration of the cornea of the left, which ultimately collapsed. There was also slight facial paralysis. On the fifteenth day he died, and a post-mortem examination revealed the presence of two bullets (a fact that had previously been suspected, as two chambers of the revolver were found empty). One bullet was found embedded in the mastoid process of the temporal bone, the other was found at the junction of the squamous and petrous portions of the temporal bone with the great wing of the sphenoid. The inner table of the skull was not pierced, but raised up, and over this the dura mater and pia mater were blackened to about the size of a sixpence; above this there was an abscess in the cerebral substance containing about a drachm of pus. It seemed remarkable that the man could have discharged two chambers of his revolver, with the results already related, with such unerring aim as not to injure the external ear, particularly as the absence of any blackening about the orifice of the auditory canal would seem to indicate that the pistol could not have been held very close. Further, that the bullets did so little damage as experiments with the rest of the cartridges proved that, at the distance of a yard, a bullet would go clean through a three-quarter inch deal board, and even at ten yards would be very deeply embedded.

Dr. Earle also showed a specimen of Aneurysm of the Arch of the Aorta, which he had removed from a middle-aged man who died suddenly. He had been a patient at Addenbrooke's Hospital under Mr. Laurence Humphry with symptoms indicating a tumour pressing on the œsophagus, but there were no definite physical signs. The aneurysm was in the third part of the arch of the aorta, and had ruptured into the œsophagus by a small ragged orifice.

Dr. Bradbury exhibited a specimen of Sarcoma of Ovaries, and read the case of a woman, aged thirty-eight, single, from whom the growth was removed. Her condition when admitted into the medical wards on March 7th, 1885, was as follows: the patient was thin and had rather the "ovarian expression," the abdomen measured thirty-five inches at the umbilicus, not uniformly distended but larger on the right side, where a hard swelling could be felt, it was dull to percussion; elsewhere percussion was resonant except in flanks. The lower part of the chest was dull to percussion on both sides, with feeble breathing, more especially on the right side. Urine 1025, no albumen. The ascites and effusion into the pleura increased and the legs began to swell; on March 22nd, there being much dyspnœa, the right pleural cavity was tapped, and 104 ounces of serous fluid drawn off, with temporary relief. The patient died on March 25th. The post-mortem examination showed much ascites, and in the right iliac region was found a large irregularly nodulated hard tumour pushing the intestines aside, and pressing the uterus downwards and to the left side. It was not adherent to surrounding parts, and was evidently growing in the right ovary. The left ovary was the seat of a similar tumour, only much smaller. The uterus was healthy. The peritoneum, especially that covering the under surface of the diaphragm, and the mesentery were studded with hard flattened nodules of small size; similar nodules were found covering the left pleura and lung, and there was much clear fluid in both pleural cavities. A microscopic examination of the ovarian tumours and secondary nodules showed that beneath the outer white glistening capsule was a zone of varying thickness, corresponding apparently to the tunica albuginea of the normal ovary, consisting of lamellæ formed by fasciculi of large spindle-shaped cells. From this zone septa descended into the bulk of the tumour, dividing it into larger and smaller lobules, and finally became lost by blending with the deeper substance. The lobules were good examples of the mixed-celled sarcoma, and some contained remains apparently of small Graafian follicles. All the secondary growths examined proved to be mixed-celled sarcomata. A direct connexion between the pleural and peritoneal growths was seen in the diaphragm, where clusters of sarcoma cells stretched along the lymph spaces between the tendons and muscle bundles and connected the serous sacs.

Vaccination Grant.—Dr. James Tily of Chiswick has received the Government grant for efficient vaccination.

THE GENERAL COUNCIL OF MEDICAL EDUCATION & REGISTRATION.

Thursday, May 21st.

Sir H. Acland, President, in the Chair.

The Council went into committee for the further consideration of the recommendations of the Branch Councils. The debate was resumed by

Mr. Simon, who said that in adopting the proposal of Dr. Banks yesterday the idea of the Council was that the second alternative should be adopted by the student, and that before entering on his professional course he should pass an examination in mechanics, elementary physics, chemistry, and biology. The promoters of the amendment, however, appeared to think that four years should be spent at a recognised medical school. His own view was that as much liberty should be allowed to the student as possible. Could it be gravely asserted that if a man spent six months as an assistant house-surgeon in a good provincial hospital like those of Bradford and Sheffield, or at a lying-in hospital, the time so spent should not be included in the curriculum? The English proposal left room for alternatives of that kind. If too much pressure was put on the student in favour of medical schools, the result might be that the number of students would be altogether out of proportion to the opportunities for practice. Thus several dressers might gather round one patient, and there were stories of two dressers having to attend to one leg between them. The Council ought to call in to the aid of medical instruction as many hospitals and infirmaries as possible. Many of the members of the Council were also members of recognised medical schools, and they should be on their guard against ειδωλον. If a committee of curriers were considering the question of armouring ships they would probably come to the conclusion that there was nothing like leather. He objected to tyrannical regulations. If it were possible to do with an examination without any curriculum at all, he should be in favour of it. The English proposal was as far as it was desirable to go, and he hoped that the amendment would not be pressed.

Mr. Teale agreed that it was undesirable to rivet the fetters too closely. Each branch of the kingdom should be at liberty to adopt the method it thought most convenient.

Dr. Pettigrew deprecated the system of pupilage alike for the student, the profession, and the public. A busy practitioner could hardly be expected to give much time to teaching. In a hospital it would be better for the student to have only one case well demonstrated than a great number of cases treated in a general way. He did not think three winter and two summer sessions sufficient. Many instances had arisen of the evils produced by unqualified assistants, and they were calculated to bring the profession into disrepute. He was therefore in favour of Dr. Haldane's amendment.

Dr. Humphry protested against Scotland and Ireland laying upon England a yoke which she was unable to bear. Scotch students might be willing to listen to a hundred lectures on surgery in six months, and to profit by them; but it was otherwise with English students. The details and processes of education should to a great extent be left to the licensing bodies themselves. To the Scotch and Irish mind a pupil was an unqualified practitioner, but in truth he was not a practitioner at all. In many cases it was a good thing for a young lad from school to be placed under a judicious medical practitioner, who could look after not only his studies but his morals. He had himself commenced his studies with a strong dislike to everything connected with the profession, but he was placed under a superior medical practitioner in a town where there was a hospital, and where his abhorrence was converted into an ardent love for his studies. Subsequently he had three years in a medical school, and then had the good fortune to become surgeon to a hospital. At hospitals like those at Brighton and Norwich the student was under first-rate practitioners, and it would be monstrous to exclude work done at such places from the curriculum.

Dr. Storrar admitted that no better instruction could be given than at hospitals like that at Norwich, and under a good medical practitioner; but the Council's recommendations were not mandatory, and the bodies might interpret them with some latitude. If, however, the four years' study were not clearly specified, students might devise means for evading the regulations, and parents might do the same from motives of economy. The College of Surgeons and the College of Physicians might be justified in allowing a year to be passed at the hospital at Exeter or Leeds, but that was different from laying down as a principle that four years might mean something less than it really did.

Dr. HAUGHTON thought that the debate was the most important of any in which he had taken part since he had been on the Council. In Ireland there were thirty-two county infirmaries with from forty to sixty beds, and there were also fever hospitals. Many of the most distinguished physicians and surgeons in Ireland had attained high rank after attending those infirmaries, which were recognised by the College of Surgeons. The time spent in a county infirmary was regarded as equal to half the time in a metropolitan hospital; and it was the same at Trinity College if the surgeon at the infirmary was considered competent by medical professors. But Ireland would never recognise apprenticeship to a private practitioner, who could not possibly teach mechanics, physics, chemistry, zoology, and botany. No doubt an exceptional result of private study had been produced in the case of Dr. Humphry, but notwithstanding his imperfect education (laughter), Dr. Humphry would have risen still higher if he had been trained on the Scotch or Irish system (much laughter). He (Dr. Haughton) strongly objected to giving the student permission to spend a year and a half out of the four years as an apprentice.

Dr. HUMPHRY reminded Dr. Haughton that the resolution only referred to recognised schools, not to infirmaries or hospitals.

Dr. SCOTT ORR said he did not think there should be one rule for England and another for Scotland and Ireland.

Dr. DUNCAN said he objected to the English proposal, because it was practically undoing what was done on the previous day. It was absurd to require five years and not to require any more study. He had opposed the five years, not because he objected to that time, but because he thought the motion premature. After all, the Scotch proposal only required thirty-three months out of the sixty to be spent at a medical school, leaving twenty-seven months to be spent elsewhere. That was a most liberal arrangement; indeed, he thought far too liberal. With such an arrangement the provincial hospitals would have plenty of applicants for their offices. With regard to attendance on lectures, he had no doubt that the present movement for a teaching university for London was for the purpose of extending professorial teaching and providing more lectures. English students were as desirous as Scotch students to have more lectures, as he could state from his own experience. At present the lectures on midwifery in London were very meagre. Some courses did not consist of more than twenty lectures, which he considered a mere farce. Some of the students who had attended such lectures in an eminent school had told him that they wished they had never gone to them, as they were not worth hearing.

Dr. Duncan's speech was interrupted by the announcement that the hour had arrived which the Council had appointed for the further consideration of the case of Ebenezer Bryceson. Strangers then withdrew, and the case was considered in private.

On the readmission of the public it was announced that the Council had agreed to the following resolutions:—(*a*) "That Ebenezer Bryceson is judged, after due inquiry, to have been guilty of infamous conduct in a professional respect, in that he has produced to the Royal College of Surgeons of England forged certificates of professional study." (*b*) "That the General Medical Council, though it adjudges Ebenezer Bryceson guilty of infamous conduct in a professional respect, does not, under all the circumstances, now direct his name to be erased from the Medical Register."

Sir H. PITMAN moved: "That the solicitor of the General Medical Council be authorised to take the opinion of such counsel as he may think fit as to the readiest mode of carrying into effect the penal clauses of the Medical Act."

The motion was agreed to without discussion.

Dr. STRUTHERS suggested that, as all the educational business could not be completed at the remaining sittings of the Council, it would be better to take the other business first.

The Council then adjourned.

FRIDAY, MAY 22ND.

SIR H. ACLAND, PRESIDENT, IN THE CHAIR.

The further consideration of the motion and amendment with regard to Recommendation 21 first occupied the attention of the Council. By permission of the Council the amendment was altered to read as follows: "At least four winter and three summer sessions shall be passed at a school or schools recognised by any of the licensing bodies mentioned in Schedule A of the Medical Act."

Dr. DUNCAN, continuing, said that upon coming to London he increased the number of lectures on midwifery from a nominal forty, which was a practical thirty, to between seventy and eighty. The lectures were given every day in the week, and it was the largest midwifery class in England. If he gave 100 or 120 lectures, he was sure students would attend regularly. When the question of midwifery was under consideration about six or eight years ago, two of the most eminent medical lecturers on midwifery in London wrote clamorously for an increase from forty to 100 in the number of lectures. Dr. Humphry's opinion therefore, as to the capacities of English medical students, was not held by some of the eminent midwifery lecturers. The recent movement for a teaching university in London was doubtless partly the outcome of a desire for introducing into London what might be called the Scotch system of education. It would be a very great pity, he thought, if the extension of the curriculum for five years was not utilised in that way. He was satisfied that the apprenticeship system in England and Scotland was only valuable under peculiar conditions. If that system was ever restored, it must be in that modified collegiate method which was practised with great advantage in Edinburgh and Dublin. He should therefore support Dr. Haldane's amendment.

Mr. MACNAMARA said he was surprised to hear the observation of Dr. Humphry recommending the Council to legislate for Scotland and Ireland, and not to attempt to touch England. He wished to say that sitting round the Council table of his College were some of the most distinguished men in medicine, surgery, and midwifery (including Dr. Kidd), all of whom were engaged in teaching, and most of whom had commenced as grinders; and seeing that such men had suggested and enforced the plan of education now pursued in Dublin, it was only natural that the Irish representatives should bring it before the Medical Council. They were assembled not to legislate for one division of the kingdom or another, but to make general laws applicable to all. Dr. Humphry had told them of his own experience in connexion with his residence with a provincial practitioner. He (Mr. Macnamara) might be permitted to narrate some experience of a different kind. On the previous evening he had met a distinguished officer in the army; he had been educated according to the Irish system, and attributed to that method the high position which he had attained. He was an apprentice of his (Mr. Macnamara's), and he said: "After I left you I went to provincial practice as an assistant, and I was so disgusted with it that I resolved to enter Her Majesty's service. The gentleman had a large practice. I used to go round and prescribe for patients, and when I came back I often found my prescriptions altered because the medicines were too expensive. The pupils made up the prescriptions, and that was the experience they had to enable them to present themselves for examination. The practitioner himself taught them nothing because he did not know anything to teach. The students spent part of their time in compounding prescriptions, and the rest of the time in smoking." They could never consent to anything of that kind in Ireland or Scotland. Their duty was to legislate for the United Kingdom, and to provide one system of education applicable to every portion of Her Majesty's dominions. What the College of Surgeons in Ireland did was to allow twelve months in a provincial hospital to count as six months in a metropolitan one; but if a man spent his whole lifetime in a provincial hospital he must still spend four winter and three summer sessions in a recognised medical school. In three towns in Ireland there were not only hospitals but admirable schools, where the student could carry on his studies as well as in Dublin.

Dr. HUMPHRY desired to remind Mr. Macnamara that he had never suggested separate legislation for one portion of the kingdom. The resolution he had supported was that at least one winter and two summer sessions should be passed at some recognised school, but that if either of the three divisions of the kingdom desired to extend that period it should be at liberty to do so.

Mr. Marshall, in supporting Dr. Haldane's amendment, said that, having gone on the line of extending the period of study, the Council would be inconsistent if it did not endeavour to utilise the additional period in the best possible way. It was the business of the Council to take care that students had a good knowledge of the science on which medicine was founded. When men left the schools they rarely returned to them, and it was only the education received in the schools over which the Council could exercise any control. They could not control practitioners, but they could insist on a high-class scientific education in the medical schools of the country.

Dr. Struthers considered that the point at issue was the most important of those that had been brought before the Council. The three years' English system had always been looked upon in Scotland in connexion with the drugging and apprenticeship system, which was the worst feature of practice in England. No doubt the student might learn something from a general practitioner, but would he learn as much as he could at a medical school? The practitioner was a busy man, constantly in the saddle or in his brougham, and the pupil was chiefly occupied in making up prescriptions, learning really nothing of what was inside the body. It was impossible to combine a trade and a profession. According to the English system, a medical man might be tempted to say, "I do not think my patient needs anything, but if I prescribe a dose, it will be 2*s*. 6*d*. or 5*s*. in my pocket." Such a system was degrading. The medical man in Scotland was a gentleman occupying the same position as the clergyman and the lawyer. Was that the case in the provinces in England? ("Yes.") According to his experience it was not.

Mr. Simon: As much as in any other division of the kingdom.

Dr. Struthers said that apprenticeship was part and parcel of the English system. It had been said that the Scotch graduates were not fitted to be good assistants. The fact was that they were too good to be assistants. They would make bad assistants in the same way that they would make bad grocers' assistants, and in that sense the worse they were the better. The student must begin with anatomy and physiology, and then proceed to pathology, and have some clinical training besides, before he was fit to visit patients. A man might have a thousand midwifery cases and yet be an unqualified man. The fourth year was really the best year for the student, and they could not afford to lose sight of him during that year.

Mr. Simon said that no doubt amusing stories could be told with reference to general practitioners; and if it contributed to Dr. Struthers' happiness to believe that Scotch graduates were too good to be assistants to English practitioners, they could have no objection to it. But the question was not one of medical apprenticeships. The main question was whether public provincial hospitals should be recognised, or whether there should be a narrow limitation of medical education to a comparatively small number of specially privileged schools. They had no right to say that a medical practice could not be learned in a provincial hospital. His own bias would naturally be in favour of a London medical school, but he objected to a despotic law such as some members of the Council desired to impose. The English proposal was that a certain minimum period should be spent in a particular way; but if any of the licensing authorities desired to increase the period they were at liberty to do so.

Dr. Chambers said he was anxious to extend the curriculum, in order to afford an opportunity to candidates for holding residentships or other medical appointments.

Dr. Quain said it was true that a man might get but little good from his residence with a general practitioner, but he might get still less good at a medical school. He believed that Dr. Struthers greatly undervalued the training to be obtained under a general practitioner. As to the value of lectures, with great respect to Dr. Duncan, he did not think very highly of them. He himself took honours at the University of London in midwifery, and never attended a lecture in his life. He could say as much against that kind of education as Dr. Struthers had said against apprenticeship. They wanted to get at results. Let the examinations be duly visited and made complete, and they wanted nothing more. As to whether there should be three or four sessions, he was ashamed to discuss such questions. Medical education was of a most unpractical character. A few weeks ago he visited a patient, and on asking the medical attendant how she was, he replied, "Temperature 100·5°," but he could tell him nothing about the state of the bowels or the urine.

Dr. Watson said that what they had to consider was the difference between the education given at a medical school and that obtained in the condition of pupilage. He objected to maintain a condition of matters which to his mind was exceedingly bad. To decide upon the briefer period, and to leave it open to the universities and corporations to determine what they would demand, would be an unfortunate step for the Council to take. After all the steps that had been taken by the Council, there was one thing especially needed to elevate the condition of the profession—viz., that the practitioner should cease to be a druggist. As to the education likely to be received under a country practitioner, he considered that it would be worse than nugatory. He had been told by a friend who had been a pupil of a general practitioner in London (now dead), who had a number of ladies of distinction under his care, that sometimes when the medicines were being dispensed he would say, "Lady So-and-so is too well; put a little antimony in her mixture." Nothing of that kind would be likely to occur in connexion with the education given in a public school. Dr. Humphry had given a true picture of his own early experience, but it should be remembered that since that time the profession had undergone a great change. The present days were far removed from the time when one of the duties of a practitioner's assistant was to go body-snatching.

The President, before putting the amendment, said he had heard with some regret more than one humorous description of things that had occurred in former days in connexion with the medical profession. Anyone of his own age could confirm the truth of the descriptions; but he was quite sure some of the most hard-working, wise, and honourable Englishmen were to be found among country practitioners. He had, from accidental circumstances, a considerable knowledge of them in various parts of England, and if he were asked for a typical man of a practical, serious, and benevolent character, he would undertake to produce him from among the general practitioners of the kingdom. He also knew something of the difference between the circumstances of a Scotch and an English practitioner. It was an error to suppose that it was possible for all country practitioners in England to rely upon the quality of the drugs or the skill of the druggist in remote districts. In many cases the medicines could not be properly dispensed if they did not do the work themselves.

The amendment was then put, and carried by a majority of 16 against 5, three members not voting.

On its being put as a substantive motion,

Dr. Lyons moved as an amendment: "That at least four winter and three summer sessions be passed at any school and hospital recognised by any of the licensing bodies mentioned in the Medical Act." This, however, was not seconded, and it accordingly fell to the ground. The motion was then put and carried.

The next recommendation considered was No. 22: "No teaching or licensing body should insist on the student taking more than one course of lectures on any one subject."

Sir H. Pitman said it was the opinion of the English Branch Council that the recommendation should be omitted altogether; but perhaps it would save time to accept the suggestion of the Scotch Branch Council, seeing that anatomy and clinical instruction were exempted from the general rule laid down.

Dr. Haldane moved, in behalf of the Scotch Branch Council, that the recommendation should read as follows: "No teaching or licensing body should insist on the student taking on any one subject more than one course of lectures, which should include practical instruction, but practical anatomy and clinical instruction should be exempted from this recommendation." In Scotland, he said, a course of lectures generally included 100, besides 50 as an additional practical course. That number was too great, and involved considerable additional expense to the student. Some of the 100 lectures should be devoted to practical teaching, except in the case of practical anatomy and clinical instruction. A single course, however, in practical anatomy and clinical instruction was not sufficient.

Dr. Haughton said he was willing to accept the Scotch proposal if "surgery" were included in the exemptions.

Dr. Haldane accepted Dr. Haughton's suggestion, and the motion was modified accordingly.

Mr. Simon thought that the matter should be left to the discretion of the schools. He agreed with the suggestion of the English Branch Council that the recommendation be omitted, and he would move as an amendment that that course be adopted.

Mr. MARSHALL seconded the amendment, which was carried by a majority of 11 against 9; and it was also carried as a substantive motion.

Sir H. PITMAN moved that Recommendation 23 read thus:—"The following are the subjects without a sufficient knowledge of which no candidate should be allowed to obtain a qualification entitling him to be registered:—(1) Chemistry, including the principles of the science, and the details which bear on the study of medicine, and the rudiments of heat, light, and electricity; (2) anatomy; (3) physiology; (4) materia medica and pharmacy; (5) pathology; (6) medicine, including medical anatomy, clinical medicine, and therapeutics; (7) surgery, including surgical anatomy and clinical surgery; (8) midwifery, including diseases peculiar to women and to new-born children; (9) theory and practice of vaccination; (10) forensic medicine."

Mr. SIMON seconded the resolution, which was then put and carried.

Dr. HALDANE moved: "That hygiene be added—viz., No. 11."

Dr. HERON WATSON seconded the motion, which was agreed to.

Dr. SCOTT ORR moved: "That mental disease be added as a separate subject—viz., No. 12." He remarked that numbers of practitioners were quite at sea with regard to insanity, although the most appalling consequences might result from their ignorance.

Dr. DUNCAN seconded the motion, which was supported by Dr. BANKS.

Dr. HAUGHTON, referring to the recent trials in Dublin, said on that occasion many witnesses were called, some to swear that the accused was insane, and others that he was shamming. Such a state of things was a scandal to the medical profession.

Dr. HERON WATSON approved of clinical education in mental disease.

Dr. PETTIGREW considered that the subject might come in as a department of medicine.

Dr. STRUTHERS moved as an amendment, and Mr. SIMON seconded: "That the following footnote be inserted:—It is understood that insanity, diseases of the skin, and other subjects on which special instruction may be given, are included in the above enumeration."

Dr. LYONS said that a Bill having reference to mental disease was now in Parliament, and it would not do for the Council to treat the subject as a mere subsidiary matter.

By permission of the Council, Dr. STRUTHERS then withdrew his amendment, and the original resolution was agreed to.

The Council then determined to dispense with Recommendations 24, 25, and 26.

Sir H. PITMAN moved, and Mr. SIMON seconded, that Recommendation 27, chap. 5, read as follows:—"The professional examinations shall be so framed as to secure that the knowledge of every practitioner whose name appears in the Medical Register has been tested in all the subjects of professional education which the Council deems essential—namely, (1) chemistry, including the principles of the science and the details which bear on the study of medicine, and the rudiments of heat, light, and electricity; (2) anatomy; (3) physiology; (4) materia medica and pharmacy; (5) pathology; (6) medicine, including medical anatomy, clinical medicine, and therapeutics; (7) surgery, including surgical anatomy and clinical surgery; (8) midwifery, including diseases peculiar to women and to new-born children; (9) theory and practice of vaccination; (10) forensic medicine; (11) hygiene; (12) mental disease."

The motion was agreed to.

The recommendations that had been passed in committee were now adopted by the Council.

The following report by the Dental Committee was, on the motion of Sir H. PITMAN, seconded by Dr. H. WATSON, received and ordered to be entered on the Minutes:—

"The name of Charles Russell Turner, [illegible] having been [illegible] the Dental Committee [illegible] December [illegible] Edinburgh [illegible]"

The Council then rose for the day.

SATURDAY, MAY 23RD.

SIR H. ACLAND, PRESIDENT, IN THE CHAIR.

The Council reassembled at one o'clock.

Sir H. PITMAN, as chairman of the Business Committee, asked the President what course the Council desired to take in respect to the offence committed by Mr. Ebenezer Bryceson under Sections 39 and 40 of the Medical Act.

The PRESIDENT said that that question of course referred to the entry of the Bachelor of Medicine degree of Cambridge upon the Register. He could not say what course the Council was likely to take with reference to that, but he thought it his duty to apply to the solicitor of the Council to ascertain what, if anything, in his judgment should be done. As soon as his reply was received, it would be laid before the Council; but of course that could not be done during the present sitting.

The Council then resolved itself into committee for the purpose of the further consideration of the reports by the Branch Councils in regard to the General Council's recommendations as to the age at which students should be licensed to practise, and on professional education and examination.

Clause 29: "The professional examinations should be arranged in two divisions, the first division to embrace the more elementary subjects. The first division may be completed at or before the close of the second year of professional study, but the second division not till the expiration of two years after the passing of the first division, nor before the completion of the fourth year of study. The examinations, and the subjects included in each, should be such, and in such order, as may ensure, as far as possible, a due continuity and sequence of study."

Sir H. PITMAN moved the adoption of the English Branch Council's recommendation, although he could not quite agree with it. "The candidate should not be admitted to the second examination till he has passed the first, and he should not be admitted to the third examination till at least twenty-one months after passing the second, nor until the completion of forty-five months of medical study." His own feeling was that the final clause of the existing recommendation was the only one that the Council should adhere to. It seemed to cover all that they desired to lay before the licensing bodies. The Council should confine itself to general principles, and if those principles were not carried out, and they were sufficiently serious to warrant any interference with the privileges of the bodies, it would then be time enough to interfere.

Mr. SIMON seconded the motion.

Dr. HAUGHTON moved as an amendment the recommendation of the Irish Branch Council—viz., that the first two paragraphs of the existing recommendation should be omitted and the last paragraph retained.

Dr. BANKS seconded the amendment, which was agreed to.

Sir H. PITMAN moved the omission of Regulation 30, which specified the subjects to be included in the first and second divisions of the examinations. He said the principle was admitted in the clause just agreed to, and the Council had already expressed the opinion that they should not state in what manner the subjects were to be considered.

Dr. HAUGHTON seconded the motion.

Dr. STRUTHERS thought the Council might define what the final examinations should be, though he did not think they could possibly agree as to the earlier ones.

Dr. PETTIGREW said the Scotch Branch Council entered into the matter very carefully, and divided the examination into three divisions, specifying the subjects. From the students' point of view that was of very considerable importance, and he did not see what harm could accrue from such a scheme as was presented by the Scotch Board.

Mr. MACNAMARA said that they could not follow out the recommendations of the Council in Ireland, because their scheme of education involved examination at the end of each year.

Mr. TEALE moved as an amendment: "The final examination shall not take place till the termination of the full period of medical study, and should include medicine, surgery, midwifery, forensic medicine, hygiene, and mental diseases."

Dr. STRUTHERS seconded the amendment, but adhered to the opinion [illegible]

Mr. SIMON [illegible] general [illegible] purport [illegible] that the general proposals [illegible] were really better one.

Sir H. PITMAN said the subjects [illegible] those adopted by all the licensing bodies. They might be quite well left out. After all, they were but recommendations, and were not needed, as they had already been adopted.

On the suggestion of the President, the amendment was divided, and the first clause, "The final examination shall not take place till the termination of the full period of medical study," was agreed to.

The second clause, specifying the subjects, was withdrawn; and the first clause, on being put as a substantive motion, was agreed to.

Clause 31, "An examination in the earlier subjects of professional study should take place before the end of the first year of professional study," was omitted; and Clause 32, "The professional examination should be conducted both in writing and orally, and they should be practical in all branches in which they admit of being so," was agreed to.

With regard to Clause 33, "Not less than two examiners should take part in every oral and clinical examination,"

Sir H. Pitman moved the adoption of the English Branch Council's recommendation, which merely contained a verbal alteration, "Two examiners at least," &c.

Dr. Struthers seconded the motion.

Dr. Haughton said he approved of the recommendation heartily as far as the clinical examination was concerned, but there would be great difficulty in carrying it out with the oral examination. There was great risk of error in clinical examination, and therefore the necessity of having it conducted by two persons; but he did not accept the necessity of having two examiners in an oral examination or examination by papers.

Dr. Pettigrew said this rule was not made in the interest of the examiners, but of the students, so that they might feel that they were not in the hands of one man.

Mr. Macnamara said the opinion of the University of Dublin, as expressed by Dr. Haughton, was quite an opposite opinion to that entertained by the College of Surgeons in Ireland. They heartily concurred in the view the Medical Council had adopted, and had so recast their Court of Examiners that they were now in a position to have two at each oral or written examination.

Dr. Matthews Duncan thought it was not necessary in the case of the written examination to have two examiners to read every paper. With regard to the oral, speaking for himself as an examiner, he thought it extremely unsatisfactory to examine alone. It was a question, not of honour on the part of the examiner, but of responsibility.

The motion adopting the recommendation as altered by the English Branch Council was agreed to.

Recommendation 34, "The questions to be answered in writing should be submitted to the whole body of examiners for consideration and revision if desirable, before being proposed to the candidates," was, on the motion of Sir H. Pitman, omitted.

Recommendation 35: "The written answers should be submitted to more than one of the examiners."

Sir H. Pitman moved that this should stand as recommended by the English Branch Council: "The written answers should be submitted to at least two examiners."

Mr. Simon seconded the motion.

Dr. Haughton asked whether it was wise to put on record a number of recommendations which bodies for one reason or another would pay no attention to.

Dr. Duncan moved the omission of the clause, which was seconded by Dr. Haughton.

Dr. Haldane moved as a second amendment the recommendation of the Scotch Branch Council: "That a candidate should not be rejected on any written examination, unless his answers have been submitted to at least two examiners."

Dr. Pettigrew seconded the amendment.

Dr. Duncan said if one or two examiners read the written papers, those one or two did not reject the men; they merely laid them before the Board of Examiners for rejection. He therefore maintained that one was sufficient, and that this recommendation should be omitted altogether, because the papers were there for the whole board to read, and not for two only.

Mr. Macnamara said that in Ireland students were rejected on a written examination; but the papers were there to be referred to by the whole board if there was any question about the matter. He was in favour of omitting the recommendation.

Dr. Humphry could quite understand the Council leaving the matter to the licensing bodies; but they were not doing that; they were laying down certain general principles, one being that no part of an examination should be entirely conducted by one person. It was not casting the slightest slur upon the honour of the individual examined, but it was assuming that which they knew to be the fact, that examiners had sometimes particular views which they considered to be of vast importance. This applied to the written as well as to the oral examination; it was all very well to say the papers were before the board, and that they could look at them; the fact was the board did not look at them. He thought no part of the examination should be left to one examiner.

The amendment to omit the clause altogether was negatived.

Dr. Haldane's amendment was then put, and carried by 11 votes to 8. On being put as a substantive motion, it was agreed to by 12 votes to 6.

Clause 36, "Excellence in one or more subjects should not be allowed to compensate for failure in others," was agreed to, with the substitution of the words "other subjects" for "others."

Clause 37: "The professional examinations should be held by the several licensing bodies, except in special cases, at stated periods, to be publicly notified."

Sir H. Pitman moved the adoption of Clause 37 as amended by the English Branch Council: "The professional examinations should be held by the several licensing bodies at stated periods, to be publicly notified, and if, for exceptional reasons, special examinations be held, the fact, with explanations, should be notified to the General Council at its next meeting."

Mr. Simon seconded the motion.

Dr. Haughton preferred the existing regulation. The examination should be held at stated times, except in special cases, and those special cases ought to be very grave. He moved that the clause be retained as it already existed.

Dr. Pettigrew seconded the amendment.

Mr. Simon said it was felt that in certain cases special examinations would be necessary, and all that the English Branch Council asked was that if they were held they should be specially reported to the General Council. The amendment that there should be no special examination could not be universally accepted, and that being so, the Council desired to have some security applying equally to all the divisions of the kingdom.

Dr. Pettigrew said if it was known that the professional examination could be held only by the several licensing bodies at stated periods, to be publicly notified, it would take away all excuse for troubling those bodies to grant special examinations.

The amendment was agreed to.

Clause 38: "No university of the United Kingdom should confer any degree in medicine or surgery, whether that of Bachelor, Doctor, or Master, upon candidates who have not graduated in Arts, or passed all the examinations required for the Bachelorship in Arts, or passed, after due course of education, examinations such as are *bonâ fide* academically equivalent to those required for a degree in Arts."

Sir H. Pitman moved, and Dr. Haughton seconded, the omission of this clause, which was agreed to.

Clause 39: "As a general rule, none of the higher degrees or qualifications in medicine or surgery should be conferred on persons who have not shown evidence of higher professional attainments."

This clause was also omitted.

Clause 40: "In the examinations on several of the subjects of the curriculum—such, for example, as chemistry, including chemical physics, physiology, and materia medica—the licensing bodies should limit and define by schedule the extent of examination."

Sir H. Pitman moved that this clause be accepted, with a slight verbal alteration, as recommended by the English Branch Council.

Mr. Simon seconded the motion.

Dr. Pettigrew moved as an amendment the omission of the clause.

Dr. Haughton seconded the amendment, which was agreed to.

Clause 41 was agreed to in the following form: "In no case should the examination of a candidate in any subject be conducted exclusively by his teachers in that subject in the school in which he has been educated."

Clause 42, "Observation with the microscope should form part of the examinations of candidates for a licence," was, on the motion of Sir H. Pitman, omitted.

The adoption of Clause 43 was then moved by Sir H. PITMAN as altered by the English Branch Council: "Every candidate for the final professional examination should be required to give evidence that he has had sufficient opportunities of practical study, with care of patients, medical, surgical, and obstetrical, in hospital, dispensary, or elsewhere."

Dr. HAUGHTON seconded the motion, which was agreed to.

Clauses 44 and 45, providing that in examinations in anatomy candidates should understand that they might be called upon to perform actual dissections, and specifying the form of the returns to be made for the licensing bodies, were omitted.

The Council then resumed, and adopted the various recommendations agreed to in committee.

Dr. HAUGHTON moved: "That, in accordance with the recommendation by the Preliminary Examination Committee (Minutes for May 20th, p. 84), the examinations of the Queen's Colleges of Belfast, Cork, and Galway, and those conducted by the Civil Service Commission, be removed from the list of recognised preliminary examinations." The ground upon which this was recommended was because those examinations were superseded by the matriculation examination of the Royal University of Ireland, to which those Colleges were now affiliated. The committee also recommended that the name of the Civil Service Commission be also removed from the list, as their examinations were not fixed at a definite standard, but varied with the service for which they were intended, and also because these examinations were not attended by medical students.

Dr. STORRAR seconded the motion.

Dr. LYONS deprecated taking any step which would bring the Council into collision with the Civil Service Commission, which was one of the most powerful bodies in the kingdom at the present day.

Dr. HAUGHTON said the Civil Service Commission had sent in no answer to the questions forwarded by the Council.

Sir H. PITMAN said the Commission was very much surprised that it came to be put upon the list at all.

Dr. HAUGHTON said nothing could be further from their intention than the idea of giving such a body as that a slap in the face. It was a splendid body, but it did not want to be on their list; and the very fact that it was utterly unable to give the Council the information they wanted, showed that it ought not to be there.

The resolution was agreed to.

Dr. STRUTHERS moved: "That a more complete and continuous system of visitation of examinations is desirable, and that it be referred to the three Branch Councils to consider the subject and to report on it to the Council before its next meeting."

Dr. HERON WATSON seconded the motion.

Sir H. PITMAN said he was rather against pledging the Council to the statement "that a more complete and continuous system of visitation of examinations is desirable," but he saw no objection to the Branch Councils having the subject referred to them for consideration and report. He therefore moved, and Dr. Struthers was willing to accept the amendment: "That the question of a system of visitation of examinations be referred to the three Branch Councils for their opinion, and that they be requested to report to a future meeting of the Council."

Mr. MARSHALL seconded the amendment, which was agreed to.

Notices of motions by Dr. Lyons and Dr. Struthers having been withdrawn, the Council proceeded to deliberate in private upon the report by the Dental Committee with reference to the case of Charles Rudolph Werner, who was on Dec. 8th, 1884, convicted of misdemeanour at Edinburgh and sentenced to six months' imprisonment.

On the readmission of strangers, it was announced that the Council had resolved: "That the Council direct the registrar to erase from the Dentists' Register the name of Charles Rudolph Werner."

Mr. SIMON moved: "That the case of Mr. Bryceson, as regards his having caused himself to be registered as M.B. of the University of Cambridge, though not possessed of the qualification, be referred to the Executive Committee, and that the committee have authority to take, on behalf of the Council, such course as the legal advisers of the Council may advise to be taken, under Sections 29 and 30 of the Medical Act."

Dr. DUNCAN seconded the resolution, which was negatived by 10 votes to 7.

The PRESIDENT said, from communications which he had received, he had no doubt that he should have to summon the Council to an autumn session. He should take steps to ascertain what was the most convenient time. He tendered the thanks of the Council to Sir H. Pitman, the chairman of the Business Committee, and to the Registrar, for the admirable way in which the business had been conducted; and with this the sittings for the present session were brought to a close.

EXTENSIVE AND FATAL INJURIES, WITH FEW AND SLIGHT EXTERNAL EVIDENCES.

To the Editor of THE LANCET.

SIR,—I send you the following case, which occurred at Kingston-on-Thames this week, as showing what extensive and severe internal injuries co-existed with but comparatively trifling outward appearances:—

A coal porter was found in a crouched position on the line of metals in the railway station coal yard, on his knees and elbows, with his forehead on the ground, quite dead. At the post-mortem examination the external appearances were as follows:—There was a not very well marked bruise (i.e., small patches of ecchymosis here and there) in the front of the chest and abdomen, measuring 10 in. by 7½ in.; and a well-marked bruise, under cover of the upper arm, 3 in. from the apex of the axilla, measuring 6 in. by 6 in.; the abdominal wall was protruding about the umbilicus; and emphysema existed on both sides of the abdomen and right side of the chest; the left scrotal pouch was greatly distended. Such were the external appearances; but on continuing the examination the following injuries were revealed. The scalp, bone, meninges, and brain were normal. On examing the chest, numerous small ecchymoses were found, corresponding to the bruises, some also under the sternum and cartilages of the ribs on the left side, and on the visceral and parietal layers of the pleura. The left pleural cavity was filled with fluid blood, containing the spleen (torn in three places); the stomach separated from the gullet at one end and the pylorus at the other, and a portion of the liver about 4 oz. in weight. The left lung was penetrated (the spleen, stomach, and portion of the liver were forced through an opening in the diaphragm, admitting the double fist). The right pleural cavity was filled with fluid blood, containing numerous small fragments of liver, forced through a small tear in the diaphragm. The right lung was much bruised in its upper part; the heart was empty and natural. When opened the abdomen was found to contain numerous small clots and fragments of liver interspersed among the viscera; the major portion of the liver was reduced to pulp, and what remained was traversed by fissures in all directions. Many mesenteric veins were ruptured; four yards of small intestine were forced into the left scrotal pouch, and about one yard and a half into a small pouch in the perineum. The bladder was ruptured to the extent of admitting four fingers, and the symphysis pubis was fractured. The right kidney was torn in three places, and the suprarenal body smashed. The left kidney was bruised, with three extravasations of blood, and the suprarenal body smashed. The aorta was completely ruptured on a level with the fractured spine, and lacerated three inches lower down. The left psoas muscle was ruptured and pulped. The third rib on the right side was fractured in front; and the fourth, fifth, sixth, seventh, eighth, ninth, tenth, eleventh, and twelfth ribs were fractured and splintered in various places, some in two and others in three. The first rib on the left side, close to the sterno-clavicular articulation, and the ninth, tenth, eleventh, and twelfth ribs were also broken. The ligaments of the ninth and tenth dorsal vertebræ were torn across; the tenth dorsal vertebra was fractured across, and the spinal cord and membranes were also severed. The vertebræ on the left lateral aspect from the second lumbar vertebra were fissured upwards to the transverse fracture of the tenth dorsal vertebra. The transverse processes on the right and left of the lumbar vertebræ were fractured, that of the second left lumbar vertebra in two places. The bones of the extremities were sound.

The man had evidently been nipped between the buffers of heavy trucks and dropped on the line, where he was found.

I am, Sir, yours truly,

Kingston-on-Thames, April 28th, 1885. E. M. SHIRTLIFF.

THE LANCET.

LONDON: SATURDAY, MAY 30, 1885.

IT is a notable remark of HUME'S, that the ancient history of England is nothing but a catalogue of reversals; everything is in fluctuation and movement; one faction is continually undoing what was established by another. So it is, *mutatis mutandis*, with the Medical Council, which has just finished one of its longest and least creditable sittings. All its laws are in a state of fluctuation and movement, and with the less excuse, as it is a continuous body, made up for the most part of the same individuals. Nevertheless, its Recommendations are continually being reversed, and a great part of the time of one of its meetings *is occupied in undoing the Recommendations which occupied* a great part of the time of a previous sitting. The last meeting affords a striking illustration of this charge. No less than seven or eight of the chief Recommendations of the Council were erased, which comes to very much the same thing as reversal. Let us enumerate a few of these Recommendations. We remember that some of them were argued and fought for by some of the best members of the Council, and, if we mistake not very much, some of them have received their quietus from gentlemen who a few short years ago fought bravely for them. But to the actual reversals. If there was one thing more than another that the Council seemed agreed upon not long since, it was that there should be an examination *at the end of the first year*, with the view of giving the young student a sense of responsibility sooner than he is apt to feel it. At the recent sitting this Recommendation was omitted. Perhaps the one point on which there was, two or three years ago, the greatest consensus of opinion was that in examinations in certain subjects, as chemistry, chemical physics, &c., there should be a limitation and definition by schedule of the area or extent of examination. And this limitation was enjoined in Recommendation 40. Recommendation 40 has now been omitted, and henceforth the poor candidate will have no guide in the trackless and vast domain of these wide subjects. A most wholesome Recommendation (22) was passed a few years ago, asserting that no licensing or teaching body should insist on more than one course of lectures on any one subject. The "lecturing" element in the Council has attacked this Recommendation with success, and it is gone, and there is nothing to prevent teaching and licensing bodies exacting an unreasonable attendance on several courses of lectures on the same subject; in other words, an unreasonable amount of fees on every subject in the curriculum. This is the kind of work which brings the Council into disrespect. The reversals which we have instanced, our readers will see, are only specimens; but they are very significant ones, of great moment to medical students. Their moment is increased by noticing how the Council has been extending the curriculum, adding new subjects, and doing its best to add to the time to be spent at a medical school. This may be all right; but it is very unfortunate that such burdens should be imposed by a Council so deeply representative, not of the student or the practitioner, but of examining and teaching bodies, whose interest—we will add whose pecuniary interest—lies in prolonging and complicating the process of medical education. As our readers know, we are not of the number of those who see any immediate prospect of the public being undersupplied with medical men. We have shown frequently of late how ample is the supply of medical students, and how crowded are the ranks of the profession, leading in most places to a competition and pressure which in the professional sphere are not a little unseemly. We have pointed out that this state of matters justifies the Council in any reasonable measures for correcting laxness in medical education, and for improving the quality and methods thereof. But in the positive legislation of the Council there is too much suggestion of mere blind faith in lectures, time, medical schools, &c. On the motion of Dr. HALDANE, *the time of study to be required* of medical students is no longer three winter and two summer sessions, but "four winter and three summer sessions," and all this to be "passed at a school or schools recognised by any of the licensing bodies in Schedule A of the Medical Act." There is an extensive and a growing impression outside the Council that one conspicuous defect in the education of medical students nowadays is their ignorance of ordinary practice, and that one great improvement would be to require a certain time of the student period to be spent in private practice under the supervision of a private practitioner, whose work would supply cases and experience which are not to be met with in hospital practice. *But such practical methods* have no favour with the Council, which believes in nothing but the Schools recognised by the infallible nineteen bodies mentioned in Schedule A. How different might medical education be if the Council contained fewer representatives of those charmed bodies in Schedule A, and a few of the representatives of the men that carry on the actual medical practice of the country. Again, Dr. BANKS has succeeded in passing a resolution extending the curriculum over five years. As we explained last week, this resolution was so modified as to be not so formidable as it looks. It was made only to apply to cases in which certain preliminary subjects—elementary mechanics, physics, chemistry, and biology—had not been disposed of before the commencement of strictly medical work; and such cases are supposed to be exceptional. Still Dr. BANKS's motion is the expression of the wish of the Council to extend the length of time spent in medical schools, for which undoubtedly he adduced some *powerful arguments*. What is to be regretted is the constant change of the Recommendations of the Council, and *the fact that the very constitution of the Council* gives colour to the charge that the members of it are thinking more of the bodies in Schedule A which they represent than of the poor overburdened medical student who had ten subjects on his back before the recent meeting, and has now twelve, with the prospect of five or ten more if some other Council be not devised, or some other method of using the time and money of the present one. One resolution of much interest, proposed by Mr. MARSHALL, was passed—viz., to appoint a small committee, consisting of Dr. HALDANE, Dr. A. Smith, and himself, to superintend the preparation of statistical returns relating to the medical profession. The Council has the materials of such statistics, and it has the money to have them analysed and certified. We have seen lately how much the facts about the profession may be misstated, to the great detriment of it and the public. We feel thankful to Mr. Marshall for his resolution, and expect to feel much more so for the work to which it commits him and his colleagues—two gentlemen very likely to prove useful co-operators, and one of whom, Dr. Aquilla Smith, has already done good work of the sort.

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The paper which Dr. Angel Money read at the meeting of the Royal Medical and Chirurgical Society on Tuesday last was an original contribution to experimental pathology, having an important bearing on clinical medicine. The investigation clearly showed that a great variety of clinical phenomena could be brought about as the result of embolism of the capillaries of the spinal cord and brain. Dr. Money went further than this, and generalised to the effect that any symptom or group of symptoms could be caused by obstruction of the smallest bloodvessels. It is not improbable that the generalisation will be found to hold good. Indeed, as was argued by the author of the paper, the number of symptoms observed in the experimental investigation was sufficient to defend the position which had been taken up. Sudden death, cerebral and spinal paralysis, simple twitching, rhythmical twitching, choreoid movements and the so-called *mouvement de manège*, movements of rotation, and other forms of these "forced" or "uncontrollable" movements, were all observed as immediate effects of the introduction of granules of starch into the arterial circulation. Many of the symptoms were observed in one and the same animal. The most important observation which Dr. Money claims to have made was the occurrence of a succession of different movements, such as could not, allowance being made for the anatomical difference between animals and man, be distinguished by him and several other gentlemen from the movements of human chorea. There is almost overwhelming evidence of the dependence of most cases of chorea in the human being on disturbance primarily in the *brain*, but it is by no means certain that chorea may not be caused by lesions situate lower down than the basal ganglia. And the experiments were held to prove that in the cat and guinea-pig these choreoid movements were the result of nervous discharges originating in the nerve-cells of the spinal cord. The evidence on this point appeared to be conclusive. In a cat the abnormal movements were limited, roughly speaking, to the upper half of the body, the reflex actions were greatly exaggerated over this area, and the autopsy showed the granules of starch only in the vessels of the upper half of the spinal cord. There were no movements and no exaggerated reflexes in the lower half of the body, and no emboli in the lower half of the spinal cord. Emboli were widely scattered in the brain in the same cat, but that the cerebral lesion was not the cause of the choreoid movements seemed to be proved by the foregoing and following considerations. When in another cat the emboli were shot up the internal carotid artery and only reached the brain, no choreoid movements occurred in the limbs or trunk, and there was no obvious alteration in the state of the reflexes. Dr. Hughlings Jackson, in the course of the discussion, remarked on the importance of the discovery that irregular movements, of no matter what kind, might be caused by capillary embolism. He also argued that in the cat and other animals, whose cerebral and muscular structures were very different from those of man, it was impossible for the varied movements of human chorea to occur, for the reason that these animals did not possess the mechanism for the production of such movements. The question remains, "Does human chorea ever result from capillary embolism?" Dr. Hughlings Jackson, Dr. Broadbent, and the author of the paper are of opinion that some cases of chorea may own this causation. Several pathological observations have been recorded tending to prove this point; but it must be confessed that until we have in our possession a series of experimental investigations on the nervous system of such animals as monkeys, whose nervous system approaches nearest to that of man, the question must remain unsettled.

Dr. Head

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We invited attention in a recent number to a company which had been proposed for insuring lives without the assistance of the members of the medical body as advisers on the question of the life of the insurer. We now direct the notice of our readers to certain other proposed or *de facto* companies, in which not the life exactly but the health of the assured is provided for. It would appear that there are at the present time no fewer than three of these last-named companies before the public in competition for favour. The first of these is called the Medical Attendance Assurance Association; the second, the Health Assurance Association; the third, the Sickness and Accident Assurance Association. The object professed by the Medical Attendance Assurance Association is to indemnify its insurers against the expense of providing adequate medical attendance for themselves or their families during illness resulting from disease or accident the insurers, subject to mere nominal restrictions, having the option of selecting their own doctors. This is the first part of the programme; but there is a second, in which it is provided that the company shall indemnify, by weekly allowances or compensation, those whose source of income fails during illness, or shall recoup these persons the loss accruing through having to employ a substitute during illness to attend to their duties or business. The other two offices embrace in their plan the latter part only of the above. They propose to recoup the sick for losses sustained during sickness; and the Sickness and Accident Office, as its name implies, takes up accidents as well as ordinary illnesses. With both these last-named offices medical attendance is, so far as we can see, self-provided. The sick select and pay their own medical advisers.

The idea of an insurance for sickness amongst the richer classes is not altogether novel, although it has never yet been carried out to a sufficient extent to prove its value or its success. But practically in the sick club system the scheme has been tried amongst the working classes. In most of the sick clubs the provision for medical assistance is secured by the services of one medical man for one club. But there are, or if there are not now, there have been clubs in which the patient has had the right of selecting his own doctor, just as is suggested in the Medical Attendance Assurance Office. In this experience, therefore, we find the test of the whole subject. Again, we find the test of the whole question in those dispensaries in which the subscribers have the right to make their own medical selection. We are not prepared to say that the system which in these cases is in practical operation is always bad in its working. In some instances we must acknowledge that it acts fairly well. There are, however, elements of success in such instances which do not exist when the wealthier classes of the community come under the experiment. In the poorer classes the rate of fee for medical assistance is at one and the same time very moderate, and taking it all in all very uniform. In plain terms, the sick adopt the plan because it respectably suits their modest means. They could not easily get the required advice more cheaply if they were not subscribers to the club or dispensary; and they understand that, under the advantage of the system, they are obtaining, often from the same practitioner, the self-same benefit as other and wealthier patients obtain at a much higher cost. Therewith they are satisfied. If they were rich they would not be satisfied, a fact which is proved every day from the well-known circumstance that as men rise in the social scale they pass in the doctor's books from the dispensary or club book into the private book.

In forecasting on the scheme of the first-named new company, we have to ask if it is probable that patients who can, if they will, pay any reasonable fee to any physician, surgeon, or accoucheur, will consent to tie themselves to a method the whole success of which will depend either on a levelling system of payment or on the introduction of a third or middle agency between the sick man and his skilled adviser. We consider that the forecast is not favourable to the scheme, but if we should prove to be wrong, our mistake will be succeeded by a social change in medicine, a socialism which in a few years will bring about an entire revolution, leading probably to the abolition of fee-taking and book-keeping altogether, and to the institution of an order of practitioners remunerated by districts or communities in fixed annual stipends, and bound to give their services to all who summon them. The club doctor in high places, receiving an annual income in quarterly payments, will then be *Fortunæ filius*; and the electrical attraction of the gold and silver piece wrapped in mysterious envelope and handed with more mystery, will remain only as a memory.

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Opinion as to the best mode of treating the wound left after amputation of the mamma, is much divided just now in Paris, opposite views being firmly held by surgeons of equal eminence and experience. On the one hand, we have a school led by M. Verneuil, teaching that no attempt whatever should be made to secure healing by primary intention, but that the large wound left after free removal of the breast and of the axillary lymphatic glands should be allowed to close by granulation. In support of this view they allege that when the operation is properly performed it is impossible to secure union by first intention, and that the attempt to do so induces surgeons to narrow the limits of the operation, and so to render recurrence of the disease more certain and more rapid. They further assert that the opposite practice is dangerous, as it increases the liability to erysipelas and other forms of blood poisoning, and that the time taken for the final healing of the entire wound is not at all, or not materially, diminished. On the other hand, we find MM. Trélat, Championnière, and Polaillon representing another school, and holding equally firmly that as a rule union of the wound by first intention is not only the quickest but the best mode of healing in the majority of cases, and that when properly carried out, after a carefully planned and executed operation, it does not expose the patient to risk of local or general poisoning, or increase the danger of recurrence of the malignant neoplasm. When views so divergent are expressed by such high authorities upon a line of practice very common in the experience of all operating surgeons, a careful consideration of the question is demanded by all engaged in this department of practice. As in other similar cases, we should expect to find much of truth on each side.

Three points are to be considered in operating for cancer of the breast: the successful removal of the disease, the safety of the operation, and the speedy restoration of the patient to health. The relative importance of these points depends upon the view that may be held of the value of the operation. If it be held that it is impossible or impracticable so to operate as to prevent altogether, or to postpone for more than a short time, recurrence of the disease—if, in other words, the advantage of the operation be slight, then the certainty and speed of recovery from the operation become of greater relative importance than in the opposite condition. Where the possible advantage to be gained is great, the price to be paid for it may not unreasonably be increased. When we apply this test to amputation of the breast we find that while the success of the operation in retarding or preventing recurrence is only too small, yet it is such as to justify the surgeon in asserting that in well-selected cases he may hope to postpone recurrence of the disease for many months or years, if not permanently. From this point of view the thoroughness of the operation becomes the chief aim of the surgeon, in comparison with which the other considerations named are of secondary importance. Where, on the other hand, in more advanced cases of disease, the utmost that can be hoped for is an amelioration of the patient's condition and a short respite from the ravages of the disease, the severity of the operation assumes serious proportions, and the value of any means that render the safety of the patient greater and her recovery more rapid is proportionately increased. In cases that are favourable for the operation the parts should be very freely removed, all outlying portions of the mammary gland being carefully sought for, and the axillary glands, even when not palpably affected, excised. About this all surgeons are agreed, but it is necessary to insist upon the thoroughness of the removal as shown by the time elapsing before the reappearance of the disease as the one test by which success or failure of an operation is to be judged. The surgeon must decide in each case how the operation is best to be planned, and it is wrong to lay down any rule as to the extent of skin or other tissue to be removed, different cases requiring quite different treatment in this respect. But this imperative demand for free removal of the disease having been met, and the wound inflicted, the question arises whether there is any reason why one method of healing is to be preferred to another. It is no doubt true that great care and attention are needed to secure healing by first intention, but there is also no doubt that in many cases such care and attention are rewarded with complete success, and that the period of convalescence is rendered considerably shorter than under any other mode of healing. And unless the surgeon neglects making proper provision for drainage, and fails to protect the wound by a thorough use of antiseptics, he does not expose his patient to the danger of erysipelas and other infective wound diseases. Nor is there any *a priori* pathological reason why healing by granulation should be preferred to that by primary adhesion. The resemblance between the cancer cell and the rapidly formed and growing masses of protoplasm found in granulation tissue is an argument in favour of healing by first intention where the amount of lymph effused is reduced to a minimum, and where also the vascular hyperæmia is less and of shorter duration than in healing of a large wound by granulation. The influence of hyperæmia upon the growth of cancer is well known, and should the surgeon leave behind in his wound any cancer "germs," or cells prone to take on the cancerous development, it is in accord with pathological doctrine and clinical experience that prolonged hyperæmia and abundant cell growth of low type might stimulate the germs or disordered cells, and lead to a rapid recurrence of the disease. While, therefore, we cannot but think that the doctrine of M. TRÉLAT is sounder than that of M. VERNEUIL, we fully endorse the latter's caution, that, in attempting to secure rapid healing of his wound, the surgeon may consciously or unconsciously lessen the extent of tissue removal, and so sacrifice the greater to the lesser good. We would state the matter thus. In planning and carrying out his operation the surgeon should think only of the wide and efficient removal of the disease, without regard to the mode of healing of the wound; but having made the wound, if he finds it practicable to obtain healing by first intention, he should certainly direct his efforts to that end.

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THE *furore* excited by Dr. FERRAN's alleged protective inoculation of cholera continues unabated, or rather with increasing ardour. Last week it was reported that he had operated upon 8000 persons in Valencia alone, including two Madrid doctors—MORENO and TOLOSA—who thereby became converts to the new doctrine. It is also stated that four hours after their inoculation they experienced the cramps, diarrhœa, fever, and delirium of cholera, and that after sixteen hours "they were all right again." Farther proof of the efficacy of the measure is cited from the Alcira Hospital, where all the inmates were inoculated, with the exception of two, who declined to submit to the operation. Cholera attacked these two recalcitrants, and they succumbed to the disease. In the face of these and other facts, Dr. CAMERON did well to ask the Secretary to the Local Government Board whether he would consider the propriety of nominating a small commission to visit Alcira and report. He stated that Dr. FERRAN was desirous that an English Commission should be appointed to verify his results. Mr. RUSSELL, in his reply, promised to bring the proposal under the notice of the Secretary of State for India; but we venture to think that it would be better to send the Commission from England, as the question is one which directly involves the subject of choleraic micro-organisms that have been so much studied by a few of our scientists. It may be remembered that Dr. FERRAN adheres to the bacillary doctrine of the etiology of cholera, but that he declares that KOCH's comma bacillus is but one stage in the development of an organism, whose germs he avers to have discovered. Although we are unwilling to condemn on *a priori* grounds a discovery of such moment as this would be if verified, we are yet very reluctant to admit that such vaccination can protect from true cholera, or to see in the results as reported anything more than coincidences. Asiatic cholera is not prevalent in Alcira, nor, so far as we know, has it reappeared anywhere in Europe this year, and therefore the conditions of a crucial test are wanting. We are not surprised at the excitement that has been caused by the announcement of the alleged prophylactic; for the history of epidemics of this disease shows how much the people dread its invasion; and they would willingly submit to any measure that promised them immunity from the plague. It is significant that at the recent conference at Berlin not even Dr. KOCH himself as much as hinted at the possibility of a protective vaccination amongst the measures of meeting the disease; and FERRAN's work was only cursorily mentioned by one speaker, Professor VIRCHOW, who believed that the various forms described by FERRAN were the results of disintegration of the bacilli, and not stages in their evolution. The matter has, however, reached a stage in which it ought not to be disregarded without a full and sufficient investigation; and although we doubt very much the possibility of arriving at any satisfactory conclusion except in time of epidemic, it is very desirable that Dr. FERRAN's labours should be submitted to such an examination by competent and trustworthy authorities. We fully approve of the step somewhat tardily taken by the Spanish Government in prohibiting any further inoculations until such inquiry has proved the efficacy of the measure. For if the whole thing be proved fallacious, the task of dispelling the delusion will be the greater the larger the number of the inoculated; and if it be shown to be really efficacious, no harm will be done by deferring it until this is proved. The position of Dr. FERRAN is a difficult one; for, although he has acted in good faith, he must either be a misguided enthusiast who has pushed his conclusions far beyond their legitimate limit, or a great discoverer. Pending such an inquiry it would be unfair to judge him, but we cannot refrain from once more pointing out that to rely upon "protective vaccination" and to suffer the continuance of those insanitary conditions that favour the spread of cholera would inevitably lead to disastrous results. Nor is it possible to view with equanimity the prospect of an application of these inoculation measures to other specific diseases, an extension which would be sure to be attempted if Dr. FERRAN were proved to be in the right.

DR. WILKS has accepted the invitation of the Council of the Midland Medical Society to deliver, in November, the inaugural address of the session 1885-6.

Annotations.

"Ne quid nimis."

THE COLLEGE OF PHYSICIANS AND THE CROONIAN TRUST.

It is but seldom that a medical corporation is troubled with an *embarras de richesses*. But this is the peculiar good fortune of the Royal College of Physicians at the present time. In 1706 Dame Mary Sadlier founded the "Croonian Lectures," and instead of the amount of the modest fee which has hitherto been paid to the lecturer the College finds itself in possession of the annual sum of £207 net under her bequest. It is obvious that no such sum can be devoted to a course of lectures for which £10 has previously been found a sufficient remuneration. The College therefore recommends that application be made to the Court of Chancery to vary the deed of settlement, and the Council recommends the following scheme for the consideration of the Fellows:—

"That the present 'Croonian Lectures' be continued with a salary of twenty guineas, being double that which it is at present. That the residue of the income from the trust, after payment of the Croonian Lecturer, be invested to form a fund for the establishment of a Professorship of Anatomy and Physiology, the person holding such professorship to be called 'The Croonian Professor of Anatomy and Physiology,' and to hold such professorship for five years. That the appointment of such professor, who shall deliver such lectures as the College shall determine, be made within a period of five years from the decree of the Court."

Several Fellows have proposed amendments which would limit the tenure of the professorship, and would bring before the College any new researches, not only in anatomy and physiology, but also in therapeutics and pathology; and we can have no doubt that, in view of other lectures at the College of Surgeons and the University of London, the Fellows will expect a wider departure than is suggested by the Council, and one that will not compete with the usual lectures now annually given in London. A five years' professorship is absurd, when we consider the rapid increase in our knowledge, and the varying lights in which such knowledge may be put before our profession. In fact, we would ask, Could not the large increase in the trust fund be better used than in endowing another lectureship, if twenty guineas were paid instead of ten for the annual course now given? A more detailed and comprehensive scheme than that which is under consideration would be preferable to a hasty decision in the direction of an increased number of lectures, which would be attended by but comparatively few Fellows or other members of the profession.

THE PENAL ACTION OF THE MEDICAL COUNCIL.

A large part of the time of the Medical Council is taken up with judicial duties. While so occupied reporters are excluded, and only very limited information is afforded as to the grounds and arguments on which the judgment of the Council is founded in any given case. This is to be regretted in some respects. Courts of judgment, like courts of law, should, in general, be open courts, alike in the interest of those judged and of the profession to which they belong. The Council has erased from the Medical Register four names of medical men, as will be seen in our reports, and one name from the Dentists' Register. As far as we can gather, it is impossible to accuse the Council of severity in these cases. There is one great defect in the legal position of the Council as regards cases of misconduct. It has no power to deal with conduct otherwise than "infamous," and it has only one punishment to inflict—viz., the supreme one of removal from the Register. There is much misconduct, to which the word "infamous" could scarcely be applied. And it is in the highest degree to be regretted that the Council has not power to take cognisance of conduct that is unprofessional rather than infamous or against the public interest, and to censure, or apply degrees of punishment less than that of the capital measure of erasure. The medical authorities in Schedule A, indeed, or some of them, have such powers, but they are sorely hampered in using them, so that some who hold their diplomas go from one degree of unprofessional conduct to another with apparent impunity, till at last they outrage public law or morality and incur the one great punishment of disqualification and consequent erasure. One word of kindly warning at an early stage from the Medical Council, or from the body to which they owe their diploma, might have saved them. But it is withheld, and so it comes to pass that half the time of the Medical Council is taken up with examining gross cases of infamous conduct, and no attempt is made to deal with hundreds of instances of unbecoming and unprofessional conduct. It is not so in other professions, as was well pointed out by a correspondent last week.

THE REPRESENTATION OF THE EDINBURGH AND ST. ANDREWS UNIVERSITIES.

Sir Lyon Playfair has rather abruptly intimated his intention of not offering himself at the next election as a candidate for the representation of the University of Edinburgh. We do not forget the part that Sir Lyon Playfair has played in hindering medical legislation and in misleading the House of Commons with erroneous statistics of the profession. In view of this action, we cannot pretend to regard his withdrawal from the post which he fills with unmixed regret. The large medical element in his constituency, and his supposed relation to the profession, gave more serious importance to any such action on his part. We are little concerned with the political bearings of the step taken by Sir Lyon Playfair. But we will take the liberty of hoping that the seat will not be wasted on some aspiring lawyer, who is always ready to profit by such opportunities. Parliament is full of lawyers, and it is conspicuously deficient in representatives of science. We commend to the constituency of the metropolitan University of Scotland the claims of science, and urge them to elect a man who will worthily represent it, and who will magnify the university by recognising in it a national institution, which exists not for Scotland's benefit alone, but that of the empire. The Scotch universities have sometimes acted as if they were parochial institutions, with all the jealousy of public criticism and check which such institutions are apt to feel. The election of a great public man, one who by science or by statesmanship has shown himself to be above mere party politics, will be creditable to the University and advantageous to the State.

POSITION OF THE FŒTAL HEAD AT TERM.

As an inaugural thesis in the University of Dorpat, L Brühl has published some observations on the position of the fœtal head and the extent of its entrance into the pelvic cavity at term. In primiparæ the greatest circumference of the head was found to have passed the brim at the end of pregnancy in half the cases. In multiparæ it only reached the pelvic cavity in a fourth of the cases. The reason of the difference is to be found in the greater elasticity of the abdominal wall and of the uterine ligaments in primiparæ. In contracted pelves, where the conjugata vera measured less than ten centimetres in primiparæ, the head entered the cavity in only a third of the cases, the greatest circumference in scarcely any passing the brim, and in subsequent pregnancies the position of the head became higher more rapidly than was the case in normal pelves. The prognosis of labour depending upon the relation which exists between the fœtal head and the maternal passages, it is the practice in Berne, where these observations were made under the supervision of Professor P. Müller, to grasp the fœtus through the abdominal wall and force the head as far as possible into the pelvic canal at the completion of pregnancy. Generally, when the head has more than half entered the pelvic cavity one can predict that birth will take place naturally. On the other hand, it is by no means necessary to infer that instrumental interference will be required in all cases where the head has entered the canal to only a slight extent.

THE HOMES OF THE POOR.

THE publication of the Report of the Royal Commission on the Dwellings of the Working Classes brings more prominently to public notice the relation of vestrymen in London parishes to insanitary tenement houses. We read of a recent meeting of the Clerkenwell vestry, at which a complaint was received through the Local Government Board of the condition of certain premises in that district belonging to a vestryman, and that complaint had been made to the vestry and no action taken. In the course of the discussion it was stated that "several vestrymen made a good livelihood by being house-farmers." There may be no objection to the owners of tenement houses being represented in due proportion upon the local authority, but where officers hold their appointments entirely at the will of people of this class it becomes obvious that they are likely in some cases to be deterred from carrying out their duty. If tenants could obtain damages against their landlord for injury to health, the result of living in an insanitary dwelling, there would be less need for the interference of the sanitary inspector; but this is not possible except where a previous guarantee has been given that the house is in proper sanitary condition. In a recent action for rent in the Clerkenwell county court the defendant denied his liability to pay on account of the insanitary condition of the house, and gave a melancholy account of its defects. The verdict was necessarily for the plaintiff, but the judge expressed his disapproval of the plaintiff's conduct in letting so faulty a dwelling by declining to award costs. An appeal here to the local authority should have been sufficient; but, as the judge said, "It seems from the inquiries of the Royal Commission that public bodies will not put the law in force." The immediate remedy is obviously in the hands of the public, who have it within their power to return as vestrymen those who are more interested in seeing the law carried into effect than evaded.

DR. BRADLEY'S CASE.

WHY does the Home Secretary maintain such silence after the influential petition presented to him on behalf of the convict—a petition signed by "more than one thousand physicians and surgeons"? We have repeatedly drawn attention to the unsatisfactory verdict returned by the jury. In the interests of justice we join in the request—nay, the demand—for an immediate impartial inquiry into the merits of the case. Apart from the fact that many of the alleged acts by Dr. Bradley given in evidence at the trial were physically impossible of accomplishment, there is reasonable ground for declining to accept the theories of the prosecution as regards the main charge. In some cases clemency on the part of the Crown implies a want of belief in the *bonâ fide* of the witnesses by whose testimony the conviction was obtained; but here no such alternative supposition is necessary. The prosecutrix was shown to have suffered from epilepsy, and to have inherited a tendency to neurotic taint. What more likely, then, that imaginary wrongs were conceived by her during a transient aberration from normal innervation, and afterwards registered in her mind as accomplished facts. From whatever standpoint the merits of this unfortunate case are viewed, the same conclusion is inevitably arrived at—viz., that the conviction was utterly unwarranted by the evidence. We do not plead for mercy, but ask for justice. Here is a man who, previous to this fatal incident, bore professionally a spotless character, and is that character to be destroyed by a mere legal technicality? If the necessary scientific knowledge is not possessed by those who have the issue in their hands, in the name of common sense and public duty let those who understand such matters be left to decide whether Dr. Bradley shall be restored to his friends or finish his fearful sentence of "two years' imprisonment with hard labour." In the event of Sir W. Harcourt still refusing to reply to the appeal long since lodged with him, we pray that he may be moved to action by the general body of the profession.

ANTI-VACCINATIONISTS AND THE GORDON MEMORIAL.

THE Committee of the Gordon Memorial Fund have given evidence of shrewd judgment and sincerity in their reception of an offer lately made to them. The report reaches us from Leicester that a lady expressed her wish to hand over to the committee a house with adjacent grounds, to be used as a home for boys subject only to the proviso that vaccination should not be an essential to admission. The proposal was declined. This lady no doubt meant well, and she naturally feels aggrieved that her principles are not to be accepted along with her gift and its benevolent motive. She is clearly one of those who regard vaccination as a tyranny, fruitful of disease which cannot possibly have arisen otherwise than as stated by anti-vaccinationists, as a useless measure, and a law which it is right and lawful to break. The committee, however, think otherwise, and we venture to say that in their present action they will have the support of all who are in possession of the facts on both sides of this important question. No blame can be assigned to them for the loss of the memorial home, however regrettable that may seem in the interest of the poor. General Gordon's own abundant charity would never have sanctioned even such a gain at the cost of conscience, and the committee, in refusing the responsibility for lives which they could not protect in case of illness, have only followed the example of his enlightened rectitude.

CORPORAL PUNISHMENT AT SCHOOLS.

THE relationship between cause and effect is in many cases notoriously difficult to establish by logical proof, however clear it may be in its *primâ facie* aspect. The tendency with all of us is to seize upon the latest antecedent circumstance, and to assign to it the credit of causation. A case in point is afforded by an inquest held a short time ago at Sittingbourne. A delicate boy, eight years of age, died a few days after having received a whipping at school. The symptoms which preceded death were those of meningitis, with convulsions, and post-mortem examination verified the presence of this disease. Mr. T. Smith, the surgeon who attended the child, could see no clear connexion between the fatal disease and the whipping, but allowed that the shock of the punishment might possibly have had some effect in determining the course of the illness. The jury found a verdict accordingly, but severely censured the schoolmaster for cruelty. We do not approve of severe bodily chastisement for children at school, but it seems to us nevertheless that a somewhat forced connexion has been established in this case between the punishment inflicted and the disease which was afterwards observed. Inflammation of the brain membranes is one of the most deadly enemies of child-life, and is far more apt to appear as the climax of an undefined constitutional delicacy than as a consequence of injury. Dormant in many children from their inherited feebleness, its chief provocatives are recognised by all practitioners to be want of nutritious food, fresh air, and exercise. It may well be that the weakly child in the present instance owed his death to these commoner evils rather than to his master's harshness. We do not learn that he was beaten about the head, though at the same time it seems clear that the rod was used with more than necessary freedom. The lesson, however, which is most apparent from the facts is that there are young children in school-training for whom their discipline and tasks are equally excessive, and who are, as they stand, unfit to be at school at all. Usually ill-health can be detected by a careful parent before this stage is reached, but it does not necessarily afford such proof as to have allowance made for it under our compulsory educational system. The jury's finding of cruelty, which may have been fair enough in itself, falls short, in our opinion, where it fails to recognise that work as well as punishment should be light in the case of weak children, and that hunger and fatigue may sometimes cause as much injury to health as positive hard usage. Already measures of reform are on foot in many schools. Cheap and good food and recreation hold a definite place in their management; and we may soon be fortunate enough to note a decline in the cramming system, and the adoption of some plan of efficient medical supervision.

VICTOR HUGO.

The typical Frenchman is dead, and Paris—ay, France; Paris is France—honours his obsequies with bombast and blood. This genius, for Victor Hugo was a genius, and of a very exalted order, played the *rôle* of Chorus to the evolution of intellectual life and power in the people of *la belle France*. He was the poet of the Revolution. Whether he wrote in prose or verse, he was a poet; and no man perhaps ever moved the nation, for whom he lived and thought and wrote, more powerfully. It was not Victor Hugo's fault that his works did not contain more of mind and less of emotion than characterised them. They were the reflex of the mental growth of the period. Had they been of higher calibre, they would have been false to their key-note, out of tune with the spirit of the time. It will be long before France finds as faithful an expositor of the national feeling. Victor Hugo's chamber was the scene of a gallant struggle of life against death. Death vanquished the victor. The man died, but his manly work remains.

DIAGNOSIS OF SMALL-POX.

Dr. Collier, medical officer of health to the Fulham District Board of Works, in his report for the fourth quarter of 1884, raises a question of some importance to the public. On November 24th he received private information that a girl residing in Westcroft-square had been ill and had had a rash upon her. Visiting the house, he found she was suffering from modified small-pox, and another child was ill with the same disease. The mother had objected to the removal of these patients to hospital, owing to the opinion of the medical attendant that they were suffering from chicken-pox. The first patient had been residing as servant in a house at Richmond, and had returned home with the spots upon her. Her late master had died after a few days' illness. He had been seen by several experienced medical men, and his death had been registered as due to "hæmorrhagic measles." A short time after his death his three children were taken ill; their disease was first thought to be measles, but afterwards chicken-pox. A woman employed to wash the clothes of the father contracted small-pox in a severe form. Nine days after the removal of the cases from Westcroft-square the stepfather of these children was attacked with small-pox. There can be no reasonable doubt that all these persons suffered from small-pox, yet the disease had not been recognised by the medical attendants in the majority of cases. It is very necessary in the public interest that medical men should have an opportunity of making themselves thoroughly acquainted with the different appearances of this disease; medical students in the metropolis are now debarred from doing so owing to the fact that the public institutions receiving these cases are closed to them. We do not desire to dictate to the managers of the Metropolitan Asylums Board in the precautions which they feel it necessary to take to prevent the spread of small-pox from their hospitals, but we believe that it would be quite possible to enable medical men and others to visit these institutions without risk to the public.

HOUSING OF THE WORKING CLASSES IN SCOTLAND.

The evidence obtained by the Royal Commission on this subject shows that although on the whole the Scotch are better off than the English working classes with regard to dwelling accommodation, there is still the same absence of provision for the very poor. The number of single-roomed tenements, each of which is usually occupied by a family, is very considerable; in Edinburgh there are 14,000 of such tenements, and in Glasgow 5 per cent. of the population live in single rooms. Extensive improvements have been carried out both in Edinburgh and Glasgow with good results. The recommendations of the Commissioners are much the same for Scotland as for England, and among others include that the amount of cubic space demanded for each individual should be increased with a view to discouraging the use of single rooms. There are no special suggestions with reference to the rural population in the Highlands owing to the intention of the Government to legislate on the question of land tenure, but it is recommended that an improved system of local government should be established in the extra-urban parts of Scotland, and that the local authorities should be elected by the ratepayers.

MILK INFECTION.

The failure of a recent prosecution at Paisley, under the Dairies, Cowsheds, and Milkshops Order, deserves notice, inasmuch as it shows the insufficiency of this Order to protect the public against infectious disease conveyed by milk. We learn from the *Glasgow Medical Journal* that scarlet fever broke out among the drinkers of milk from a dairy at Paisley. A child of the dairyman suffering from scarlet fever had been kept at home, and subsequently two other children of the same family had become infected; the dairyman and his wife at this period milking the cows and serving out the milk. A prosecution was instituted, and it was brought out in evidence that the dairyman and his wife visited the children—a servant stating that her mistress "attended" them; but on behalf of the defendants the children stated that their parents did not "touch" them. The prosecution failed on the point that *contact* was necessary for the purpose of conviction. The order has evidently been drawn by someone who is ignorant of the nature of infection, and its early amendment in this and other respects is urgently needed in the interests of the public health.

THE AMERICAN MEDICAL ASSOCIATION AND THE INTERNATIONAL MEDICAL CONGRESS.

AT its meeting in 1884, the American Medical Association appointed a committee of seven gentlemen to present an invitation to the International Medical Congress at Copenhagen to hold its next meeting in Washington in 1887. As our readers are aware, this invitation was accepted; and the committee, desiring to advance all the arrangements for the meeting, and believing itself to be empowered to do so, proceeded to nominate the chief officers and to conduct the preliminary negotiations. Unfortunately, it seems that in so doing they have excited certain local jealousies; and at the late meeting of the Association in New Orleans their action was discussed and condemned, and a resolution was passed electing a committee, consisting of the seven gentlemen previously appointed and thirty-eight others, "one from each State and territory," who should "proceed at once to review, alter, and amend the action of the present committee as it may deem best." From the reports of the discussion we gather that some members of the Association consider that the appointments in the Congress should be filled up on a geographical basis, each State being considered as a distinct entity to be represented. We trust, however, that the new committee will take a wider and more enlightened view than that, and will make the appointments solely in reference to the merits of the various nominees and the degree to which they possess the confidence of the profession in the United States, as a whole, and in Europe. We may be permitted to assure our American brethren that visitors from Europe will in a large measure judge of the position and character of the profession in the States by the scientific eminence of those whom they choose as their prominent representatives. We trust that all difficulties such as we have hinted at will be wisely and amicably surmounted, and that the meeting of the Congress in Washington will be as signal in its success as a scientific gathering and in its display of true cosmopolitan brotherliness, as any previous one.

MEDICAL MISSION WORK IN CHINA.

FROM the recently issued report for 1884 of the Mission Hospital and Dispensary at Chin-Chew in connexion with the Presbyterian Church in England, it appears that ague, anæmia, dyspepsia, leprosy, and diseases of the eye formed a large proportion of the cases coming for treatment. The whole of the region in which the institution is situated is malarious, but some of the districts markedly so. The quartan variety of intermittent fever was by far the most frequently met with. In the treatment of ague the cinchona febrifuge prepared by the Indian Government has been very largely and successfully used, and only in one or two cases was it known to give rise to irritation of the stomach. The cinchona tree could doubtless be cultivated in many parts of China, and it would be a good thing for the people if the Chinese Government should take steps for its introduction and cultivation in the country. Various circumstances occurred during the year that tended to keep down the number of patients as compared with former years—the principal one being the prevalence of cholera, which broke out in the city in September, 1883, remained in an endemic form during the winter and spring months, and assumed an epidemic form about the beginning of July, 1884. In September the daily death-rate was very high; and the people, becoming much alarmed, left the city in great numbers. In the early part of this month the disease seemed to have taken on a very much more virulent type, and many of the cases were cut off in a few hours after the first symptom of diarrhœa appeared. The Chinese estimated that there were about 3000 deaths from cholera in the city. In October and November the cholera was followed by a form of continued fever, which also in many cases was fatal. This fever had many of the leading features of typhus—the temperature, the eruption, and the constipated condition of the bowels all pointed to typhus. The want of more accommodation for in-patients was very much felt during the year, but, as Dr. Grant observes, in the present unsettled state of the country it would be imprudent to take any active measures towards securing larger premises. The work which is being accomplished by this mission is a great and good one, and in course of time, as the hospital and its advantages become better known, it will be less difficult to get more suitable premises.

COCAINISATION OF THE BLADDER.

DR. P. BRUNS of Tübingen records (*Berl. Klin. Woch.*, No. 21) a case of litholapaxy in which the bladder and urethra had been rendered insensitive by cocaine. The patient had suffered from symptoms of stone for four years, and, on sounding, the stone was found to be hard and rough, and two centimetres and a half in diameter. There was also considerable purulent cystitis. As a preliminary measure the bladder was washed out with boro-salicylate solution; then twenty grammes of a 2 per cent. solution of cocaine were injected into the bladder, and ten grammes into the urethra. By shifting the position of the patient the contact of the injection with all sides of the bladder was ensured. After a few minutes' interval the bladder was filled with the boro-salicylate solution, and the operation proceeded with. Owing to the hardness of the calculus thirty-three crushings were necessary, occupying twenty-two minutes; but during the whole period no pain was felt, although previously the patient had hardly borne the passage of a catheter. During the evacuation pain was experienced each time the bladder was distended, but the anæsthesia had lasted for half an hour. Finally, a small quantity of a 10 per cent. iodoform glycerine solution was injected, with the view of protecting the abraded bladder from purulent absorption. The calculus, which was of the oxalate mulberry variety, weighed four grammes. A speedy recovery ensued.

"THE STRANGE STORY."

IT does not, we confess, strike us as strange that any young woman should out of her disordered or disturbed inner consciousness evolve a story which startles the public. Such stories are certainly not strange in the sense of being rare. They are common-place incidents in the lives of many otherwise estimable females. The most recent specimen of this class is put out of consideration on two sides. First, it is improbable to the extent of being almost impossible that an insensible person could have been publicly moved without the fact being known to somebody who would come forward and bear testimony; and we do not think the narrative is free from contradictions too destructive to be either tolerated or explained.

BARBED WIRES.

SOME time ago our columns contained an annotation, pointing out the dangers likely to arise from the use of barbed wire fencing. What we foretold is fully borne out by the statement in an Inverness contemporary, that much indignation is felt in the Dornoch district at the erection of barbed wire fences close to the public road. Two carriage accidents have recently occurred on a part of the road fenced by this wire. In both cases the horses were seriously cut by the barbs, and one of the animals has since died from the injuries thus sustained. The men in charge were also more or less injured, one of them having the palm of his hand badly torn.

MEDICAL SERVICE IN THE SOUDAN.

We have read with much satisfaction the account given by the special correspondent of the *Daily Telegraph* of the work done by the medical officers of the late campaign in the Valley of the Nile. He has given an animated and interesting description of the work as he saw it in the advance south of Wady Halfa, and in the severe engagements at Abu Klea and Abu Kru. He bears testimony to the completeness of the provision made by the head of the department for the care of the sick and wounded, and to the ability with which the arrangements were carried out by the officers in charge of the service in the Soudan. He has done a good service to the medical staff by giving a graphic account of the difficulties they experienced and the dangers to which they were exposed in the discharge of their arduous and important duties; of the cool, quiet, and methodical manner in which these were performed, and of the courage displayed in affording aid to the wounded upon the field regardless of risk and danger. "Trying as oftentimes is the situation of a medical man in civilised warfare, it is as nothing compared with the risk, responsibility, and labour devolving upon him when the contest is waged against a ferocious and savage enemy. In such a position he renders services that can scarcely be overrated." The details given of the work done by the medical officers are interesting as "a tale of forethought, diligence, capacity, and courage." The description of the services thus rendered by the medical staff affords important evidence of the value of the present organisation of the department. The correspondent states that "in equipment and supplies no department of the army was more fully provided, and ahead in all details, or better prepared to cope with work than the Medical Department"; the results were so satisfactory that he heard expressions of dissatisfaction only on two occasions, and in both instances from men who got "neither credence nor consolation for certain alleged ailments they had sought to get treated for." We trust that, although from a military and political point of view the campaign has been a failure, the labours of Surgeon-General O'Nial and the medical staff will not be overlooked, but that they may receive some appropriate recognition of the able, energetic, and satisfactory manner in which they have discharged their onerous professional duties.

PUERPERAL FEVER IN BOMBAY.

It is no exaggeration to say that during 1884 puerperal fever was a household topic among the Parsees in Bombay. The causes of the epidemic are very fully examined and discussed in a paper on the subject read by Dr. Temulji before the Grant College Medical Society. The fever seems to be more prevalent in the hot months of the year, especially before the rain sets in. This may be accounted for by the unsatisfactory state of the drains of the several parts of the city, their stagnation at different points, and the foul emanations therefrom due to extreme solar heat. Puerperal fever is not so prevalent amongst the other sections of the native community as among the Parsees, and the reasons for this are obvious. The Parsees, from false prejudices, get their women delivered on the ground floor, in many cases in a room set apart for the purpose, which as a rule is the worst part of the house, with drains either underneath or passing by the side, and the sewer air freely escaping into every part of the room; and this perhaps is concentrated on account of the doors and windows being closed for fear of the patient catching cold. Another fertile cause of this fever is the bedding which the Parsee ladies use during accouchement. After the forty days are over, they give away all their clothing and bedding to the Bhangees or Halalcores, who, looking upon them as a source of profit, sell the same without the least thought of disinfecting them. From the cotton of the beddings thus given away new ones are made and sold, which are bought by many of the Parsee ladies either for themselves or for their female attendants for use during confinement. The last, though not the least, important cause is, probably, the low vital stamina of the Parsee girl of the present period, the result probably of evils usually accompanying a higher civilisation. Want of exercise is, no doubt, a prime factor in the physical deterioration of the Parsee girls of this generation; they are disposed to lead a more easy life than their mothers and grandmothers did, and consequently they are incapacitated for severe bodily exertion.

THE UNIVERSITY OF LONDON.

We understand that the Special Committee appointed by the Sub-Committee of Convocation have agreed on a draft report, recommending the gradual abolition of life-senatorships, the direct representation of the colleges and large teaching bodies, and the formation of Boards of Studies for the regulation of examinations. The reforms which we have so often urged will therefore be soon brought authoritatively before the University, and they, to a very great extent, coincide with the bases suggested by the promoters of the Teaching University movement.

THE EXAMINATION IN ELEMENTARY ANATOMY AND PHYSIOLOGY.

One of the most interesting features of the English conjoint examination scheme is the examination at the end of the first year in elementary anatomy and physiology. We understand the number of candidates was 363. Of these, 340 passed in anatomy and 23 were rejected. In physiology 320 passed and 43 were rejected. We expect great good from students being required at the end of the first year to give a slight account of their stewardship.

THE LAW AS TO DUSTBINS.

The owner of a dustbin calls attention in a daily newspaper this week to the unfortunate position in which the householder is placed in having no immediate remedy when the parish officials neglect to remove his house dust and refuse. In point of law his dust does not belong to himself but is the property of the contractor, who alone has the right to remove it. If he were, with his neighbours, to make application to the magistrate for a summons against the contractor as the person by whose act or default a nuisance is committed, it would be easy to plead in defence that the dustbin should receive only dry material ashes, &c., and that the nuisance is really created by the houseowner himself in putting into the dustbin vegetable and animal matter, which ought to have been burnt upon the kitchen fire. After all has been said there is a remedy in the hands of the owner of the dustbin, and one far more effectual than that of complaining to a magistrate or the public. If he will exercise his powers as a ratepayer to see that proper persons are returned as vestrymen he would soon have no further ground for dissatisfaction.

THE NUDE.

The protest of "A British Matron" may have been wild and uncalled for. All the same, it is, beyond question and wholly apart from a fastidious taste, perfectly true that no inconsiderable proportion of the Art of the day appeals—intentionally—to a passion which, however cultured it may be, is not exclusively intellectual in its conception of the beautiful. It is idle to pretend that a purely Platonic love of the exquisite and refined, in colour and form, attracts the gaze f thousands to the increasing multitude of pictures repre-enting the female form unclothed. The truth is, we in ngland are too much influenced by the French type of rtistic taste and enterprise. Lady Godivas and Surprised Bathers have been becoming increasingly numerous of ate. By all means let those who like such pictures employ rtists to paint them. This is a free country. It is not, how-ver, necessary, nor, we think, desirable, to crowd the walls of our few public picture galleries with this parade of the beautiful. When, in the cycle of fashionable progress, the time comes for our women to appear in ordinary life as they are portrayed on these equivocal canvases, the latter will cease to be outrageous because they will have become commonplace.

THE PORT SANITARY AUTHORITY AND INFECTIOUS DISEASES.

REGULATIONS made by the Port Sanitary Authority for the Port of London, and approved by the Local Government Board, for the removal to hospital of persons, brought within the port by any ship, who are infected with a dangerous infectious disorder, have just been issued. By their provisions the master of every vessel is bound to report any case of infectious disease to the medical officer at Gravesend, and to remove the patient to hospital there under his supervision. The expression "dangerous infectious disorder" is explained to mean any of the following diseases: cholera, diphtheria, erysipelas, measles, scarlatina, small-pox, typhoid or enteric fever, typhus fever. A penalty is incurred for non-compliance with these regulations.

EPIDEMIC CEREBRO-SPINAL MENINGITIS.

THERE seems every probability of an outbreak of epidemic cerebro-spinal meningitis in Berlin; for within the last few weeks Professor Senator has had under his care at the Charité Hospital three cases in quick succession, and he has seen four other cases in consultation.

FROM the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of April, it appears that the Thames water distributed by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies, contained in every case less organic matter than in the previous month's samples, the improvement being most marked in the case of the West Middlesex and Chelsea Companies' waters. The water drawn from the Lea and delivered by the New River and East London Companies also exhibited a considerable improvement as regards organic matter, the amount of the latter being less than in any of the Thames waters. All the waters were clear and bright on delivery.

AT a meeting of the Council of the Queen's College, Birmingham, held on the 21st inst., Dr. James Sawyer, F.R.C.P., Senior Physician to the Queen's Hospital, was unanimously elected Co-Professor of Medicine as the colleague of Dr. Foster. Dr. Rickards, Physician to the General Hospital, and Dr. Carter, Physician to the Queen's Hospital, were elected Co-Professors of Materia Medica and Therapeutics in succession to Dr. Sawyer.

THE *Crofter* this week gives a portrait and short sketch of the professional and political career of Roderick Macdonald, M.D., F.R.C.S.E., whose name has become familiar [illegible] as a Parliamentary candidate for Ross-[illegible], and as leader in the movement to secure for the crofters representation in Parliament as the only satisfac-[illegible] of redressing their wrongs and grievances.

TYPHUS fever is reported to have assumed a serious form at Massowah. Some cases appeared at the end of April, but there were no deaths until the 24th of that month. Since then the temperature has risen rapidly, the heat becoming terrible, and the epidemic has made many fresh victims. In four days the Italian expeditionary force lost four officers, and the deaths of ten soldiers occurred in three days.

IT is understood that Professor Huxley will shortly resign his Inspectorship of Salmon Fisheries. Among those spoken of as his probable successor are Mr. Francis Day, Mr. Cholmondeley Pennell, and Professor Ray Lankester. We have no reason for apprehending that, if his resignation be tendered, it is owing to any serious impairment of his health.

DR. E. VAN ERMENGEN, who was commissioned by the Belgian Government to proceed to Marseilles in order to inquire into the epidemic of cholera there last year, has published an elaborate report containing the results of his investigation. We shall deal with this important document fully next week.

ON the 26th inst. the death occurred at Manchester of Dr. John Thorburn, Professor of Obstetric Medicine at Owens College, at the age of fifty-one. Dr. Thorburn also held the post of Obstetric Physician to the Manchester Royal Infirmary.

THE SANITARY CONFERENCE AT ROME.

AFTER oft-repeated delays the International Sanitary Conference of 1885 has at last been opened at Rome. On the 20th inst. the delegates were introduced by their several ambassadors to Signor Mancini, Minister for Foreign Affairs, and the inaugural address was then delivered by the Minister, who spoke as follows:—

"Gentlemen, I am proud that the choice of offering you a hearty welcome has fallen upon me. His Majesty the King, my august Sovereign, has charged me to convey to you the great satisfaction he feels at the friendly and sympathetic reception with which Italy's proposal for the assembling of this Conference has been received in all parts of the world. His Majesty is rejoiced to see in his capital representatives of all Governments, assembled in order to fulfil the mission of studying and resolving one of the most important problems with which modern civilisation is at present occupied—namely, the preservation of human life. We took the initiative in this matter immediately after the reappearance on the banks of the Nile, in 1883, of that terrible plague which had already so many times ravaged Europe. Your presence here is the best augury for the success of the work you have undertaken. For the first time since sanitary questions commenced to form the subject of international debates, the assembly which will now take up the study once more sees in the midst of the eminent men of which it is composed both men who are learned and specially fitted for their task by reason of their scientific competence and their long experience, and also those who, being accredited to the Government of his Majesty the King, have a claim to speak on behalf of their several countries. It is for you, gentlemen, to arrange the order of your proceedings; but whatever may be your decision in this matter, I think that the Conference, while discarding as much as possible mere theoretical discussions, and thus giving to its labours an essentially practical character, may well hold a double object in view. I feel that it is above all things important to establish between the several Governments some agreement which shall form the basis on which they may, in their respective countries, establish such measures of prevention, surveillance, and isolation as are necessary in order to deal with this plague at its source, and, as far as possible, to prevent its development. But since, notwithstanding such precautions as it may be possible to take, the disease may threaten to diffuse itself, it will be necessary, in view of such a contingency, to endeavour also to come to some understanding as to the adoption in the several countries of some system of defence against the invasion and diffusion of the disease, which, without laying burdens which are excessive and rarely efficacious on the freedom of communication and commerce, shall be rational and at the same time of practical utility. Gentlemen, your duty will be no less difficult than it is important. But if your efforts, as I venture to hope, are not barren of results, and if the conclusions to which you come, being accepted by your respective Governments, should be embodied in an international convention, you will have the right to congratulate yourselves, and will have deserved the gratitude of the whole human family. Far beyond the mere prestige of power and the splendour of victories, it is those services which are rendered to humanity and to civilisation that take the highest rank in the annals of the world. They stand as the purest and most legitimate of all the titles of nobility which occupy a place in the history of peoples. I trust and hope that of such may be the results of this Conference, which I now have the honour to inaugurate, and which I now declare to be open."

The actual labours of the Conference commenced at once by the election of Signor Cadorna, President of the Council, as President of the Conference. Certain preliminaries as to the proceedings and debates were also provisionally agreed upon, and the Conference adjourned until Friday, the 22nd inst., when it was hoped that all the foreign delegates would have arrived. With a view of facilitating the labours of the Conference, the medical delegates were, on the second day of meeting, formed into a technical commission, which will discuss the various decisions arrived at by the Vienna Conference of 1874, and which will then submit the conclusions they arrive at to the Conference as a whole.

As far as can be judged from Signor Mancini's inaugural address, and from the *personnel* of the Conference, it is evident that there will be a determined effort on the part of many to maintain quarantine by sea, although perhaps under somewhat less onerous conditions than heretofore. England, as is well known, will never again impose this antiquated restriction against cholera, and it is to be hoped that the British delegates may succeed in showing their *confrères* that our present system of medical inspection and isolation, coupled with a progressive improvement in the general sanitary circumstances of the kingdom, is the only system which is at the same time rational and capable of efficient execution. We must, however, not be too hopeful in this matter; the realisation of which will be the more improbable if we again find ourselves this summer face to face with an extending cholera epidemic. Panic will then doubtless once more reign supreme.

So far, however, the Technical Commission has done good work, having inaugurated its sittings by a vote which, with the exception of Turkey alone, recorded with unanimity a condemnation of quarantine measures by land. The lesson of 1884 has not therefore been altogether without its results, and is is to be hoped that this decision will be ratified by the Conference as a whole, and that it will lead to the adoption of those measures of sanitary improvement which afford the greatest obstacle against the spread of cholera.

The following are the names of the diplomatic and scientific delegates to the Conference who are now in Rome. One or two minor States whose delegates have not arrived may be represented later on:—

Argentine Republic: M. del Viso (Minister Plenipotentiary). *Austro-Hungary:* Count Ludolf (Austrian Ambassador), Dr. de Hofmann, Dr. Grosz, Count Batthyanyi. *Belgium:* M. Van Loo (Minister Plenipotentiary). *Brazil:* M. Callado (Minister Plenipotentiary), Dr. d'Azambuja. *Chili:* M. Matta (Minister Plenipotentiary). *China:* General Tcheng-Ki-tong. *Denmark:* M. de Hegermann Lindencrone (Minister Plenipotentiary). *France:* M. Decrais (French Ambassador), Dr. Proust. *Germany:* M. de Keudell (German Ambassador), Dr. Koch, Dr. Erhardt. *Great Britain:* Sir J. Savile Lumley (British Ambassador), Sir Guyer Hunter, Dr. Thorne Thorne. *Greece:* M. Rhasis (Minister Plenipotentiary). *Guatemala:* M. Segarini (Consul-General). *India (British):* Sir Joseph Fayrer, Dr. T. Lewis. *Italy:* M. Cadorna, President of the Council of State (President of the Conference), Dr. Baccelli, Dr. Moleschott (President of the Technical Commission of the Conference), Dr. Semmola, Dr. Buonomo, Naval Commander Randaccio, M. Casanova, M. Scibona. *Japan:* M. Tanaka (Minister Plenipotentiary), M. Nagay. *Mexico:* M. Sanchez Azcona (Resident Minister), Dr. Hijar y Haro. *Netherlands:* M. de Westenberg (Minister Plenipotentiary), Dr. Ruysch. *Peru:* M. Brunialti. *Portugal:* M. de Carvalho e Vasconcellos (Minister Plenipotentiary), Dr. Da Silva Amado. *Roumania:* M. Obédénnare (Minister Plenipotentiary). *Russia:* Baron d'Uxkull Gyllenband (Russian Ambassador), Dr. Eck. *Servia:* M. Franassovich, Dr. Danitch. *Sweden and Norway:* M. Linstrand (Minister Plenipotentiary), Professor Bergman, Dr. Dahl. *Switzerland:* M. Bairer (Minister Plenipotentiary), Dr. Reali, Dr. Sonderegger. *Turkey:* Mihrau Effendi (Chargé d'Affaires), Dr. Zoéros Pacha. *Uruguay:* M. Antonini y Diez (Minister Plenipotentiary).

THE MEDICAL AND CHIRURGICAL SOCIETY OF JAPAN.

AMONGST the many recent advances made by the Japanese in the adoption of European institutions that which relates to medical science is not the least significant. Two years ago we had the pleasure to notice a promising medical journal, the *I Ji Shimbun*, which still receives the support of those for whom it was intended; and we have now to record the success of an Association, the Sei I Kwai, established on the basis of the London Royal Medical and Chirurgical Society, for the advancement of medical science in Japan.

The Sei I Kwai, which issued its thirty-sixth monthly Fasciculus of Transactions in January last, numbers eighty-six members, including nearly all the leading representatives of the profession in Tokio, and some of the principal foreign practitioners, and is under the presidency of Mr. K. Takaki, F.R.C.S., the Director-General of the Naval Medical Department, formerly a distinguished pupil of St. Thomas's Hospital. Its business is conducted at weekly ordinary meetings, when cases are brought forward and discussed in due form, papers are read, and points of interest in foreign journals are quoted and commented upon; and at special monthly meetings held for the more systematic discussion of subjects previously announced.

The January and February numbers of the Transactions now before us present a courageous innovation, the addition of a supplement in which certain of the contents appear in English form and so become available for use and criticism by the outside world. In the January part the supplement is introduced by a report of Four Cases of Ovariotomy performed under complete Antiseptic Precautions by Mr. Takaki, with the result of three successes against one death, the fatal termination being due to shock and hæmorrhage induced by the removal of an extensively adherent tumour of very large dimensions.

Mr. Furukawa Sakayé follows with an interesting paper on Japanese Cosmetics. We learn from this that the use of the toilet adjunct in question, which is confined to women and actors, commenced as early as 724 A.D. The main ingredient, according to the analysis of Professor Atkinson (Trans. As. Society of Japan, vol. vii.), is carbonate of lead diluted with powdered rice starch. No charge of poisoning has ever been raised against the composition; but, on the other hand, it is supposed to exert a wonderful curative influence upon certain skin diseases, which Mr. Furukawa Sakayé unfortunately omits to name.

A report by the Central Sanitary Bureau of cases of Poisoning collected from the various provinces during the half-year ending June, 1884, is next quoted, and it appears that of a total of 132 instances recorded seventy resulted from eating poisonous fish, forty, with twenty-three deaths, being set to the score of the tetradon. The subject of tetradon poisoning is discussed in a subsequent paper.

A statistical table to show the prevalence of Myopia amongst the students of the Agricultural College at Sapporo in Yezo is contributed by Dr. J. C. Cutler, and states that of the pupils (whose total number is not mentioned) entering the College 29·5 per cent. were already myopic, and that an additional percentage of 23 developed the complaint after admission. As a reading people the Japanese have always suffered from myopia, but there is reason to hope that in the future its frequency may be diminished by improvements in printing, and an increased knowledge of the bearing of properly constructed desks &c. in schools upon the question of visual defects.

In the February number Dr. Osawa writes an account (translated by Mr. Tsuruda) of Tetradon Poisoning, the frequency and fatality of which have already been referred to. From this it appears that three-fourths of the twenty known varieties of the fish are found to be more or less poisonous; that the intensity of the virus increases in certain seasons, notably during the period of gestation in the month of April; that the poisonous principle is located in the ova, and sometimes in the liver also, the flesh being innocuous; and that it is active during the life of the fish, and does not develop as in the bonito and other members of the tribe as a result of post-mortem changes. The poison is described as a crystalloid, readily diffusible from the tissues into water, slightly soluble in ether, chloroform, and spirit, and susceptible of preservation for a considerable period (two months in the case of the eggs of the T. chrysops). It is said to kill by asphyxia. The writer concludes an able paper with the pithy assurance that "the only prophylactic against poisoning by the fish is to avoid eating it."

A report of the Diseases and Injuries of the Mariners in the Japanese Navy during the year 1883 presents the noteworthy feature that out of a total of 2335 cases registered under the head of general diseases, no less than 1292, with a mortality of 3·75 per cent., were due to "kakké," a disease probably of malarious origin, which appears to be identical with the beriberi of India.

The number closes with a translation of an imperial decree relating to the Licensing of Medical Practitioners in Japan. These regulations having necessarily been constructed with reference to the present stage of transition in medical education, must undergo considerable modification as time and knowledge progress; but they are well adapted for existing circumstances, and framed in a spirit of indulgence that should leave no grounds for complaint from candidates who desire to assume the grave responsibilities of the physician.

THE HEALTH OF IRELAND IN 1884.

THE General Abstract recently issued by the Registrar-General of Ireland affords valuable statistical evidence of the health condition of that portion of the United Kingdom during last year. It appears that, though the excess of births over deaths was 31,631, the population decreased 44,232 during the year, owing to the emigration of 75,863 persons. The population of the country has declined year by year since 1877, when there was a slight reaction from previous decline, and was estimated to be 4,962,570 in the middle of last year. The marriage-rate showed an increase last year, and was higher than in any year since 1878, indicating a tendency to revival of prosperity. The birth-rate, too, was slightly higher than in 1883, and equal to 24·0 per 1000, but was 1·2 below the mean rate in the preceding ten years. The death-rate was 17·6 per 1000, against 17·4 and 19·2 in the preceding two years, and was 0·8 below the mean rate in the ten years 1874-83. The marriage-, birth-, and death-rates in Ireland are all very considerably below those prevailing either in England or Scotland, with which, however, they are not comparable, owing to the abnormal age proportions of the Irish population. The constantly large amount of emigration from Ireland during a long series of years has depleted the population of that country of so large a proportion of its young adults that the marriage- and birth-rates are necessarily reduced. The unduly small proportion of children and young adults necessarily affects the gross death-rate, and destroys its value for comparative purposes, unless due correction be made for exceptional age distribution of the population; but such correction is not made by the Registrar-General for Ireland. The Irish General Abstract now under notice gives, however, much more information than the corresponding General Abstract for England and Wales, which gives only bare facts, without any calculated rates. The deaths referred to the principal zymotic diseases in Ireland last year were equal to 8·2 per cent. of the total deaths, and to a rate of only 1·45 per 1000 of the estimated population, which was 0·49 below the mean annual rate from the same diseases in the preceding ten years. Only one death was referred to small-pox during the year. The zymotic death-rate in Ireland last year was little more than half the rate from the same diseases in England and Wales, but this may to some extent be attributed to the small proportion of children in the Irish population, as children under ten years of age are invariably the greatest sufferers from zymotic diseases. One of the most useful features in this Irish return is one which we should much like also to see in the English return; this is the death-rate in each of the urban sanitary districts. The defect in this table is that the rates in 1884 are calculated upon the enumerated population in 1881; the rates, therefore, for the whole of Ireland in this table differ considerably from those given in other tables. All the rates in this table are more or less understated in consequence of the decline that has taken place in the Irish population since 1881. However, the rates respectively given for the urban and rural sanitary districts are interesting, although they require correction for difference of age distribution, as well as for the want of duly estimated populations. The urban birth-rate is given as 29·4, while in the rural districts it did not exceed 21·4. The death-rate was 24·7 in the urban and only 14·9 in the rural districts; and the zymotic rate, which was 2·8 in the urban districts, did not exceed 1·0 in the remaining or rural districts. Excluding the smallest towns, the highest death-rates in the Irish urban sanitary districts during last year were 26·3 in Limerick, 26·7 in Cork, and 29·8 in Waterford. It is doubtful, however, how these rates would have been affected if they had been calculated upon the estimated population in the middle of 1884, instead of upon the enumerated population in 1881. The statistics of infant mortality in Ireland are exceptionally favourable. The deaths under one year of age last year did not exceed 92·5 per 1000 of the registered births in Ireland, whereas the proportion in England was equal to 147 per 1000. Whether viewed as a test of sanitary condition or of care of infant life, this low rate of infant mortality in Ireland is eminently satisfactory.

WILLS OF MEDICAL MEN.

THE will and two codicils of Mr. John Mann, formerly of 4, Charterhouse-square, surgeon, but late of Warltersville-road, Hornsey-rise, and of Moreton-in-the-Marsh, Gloucestershire, who died on January 11th last, were proved on the 1st ult. by Mrs. Mary Mann, the widow, and Mr. George Loosely, the acting executors, the value of the personal estate amounting to over £18,000. There are gifts to his wife, to each of his four children, and to his executor, Mr. Loosely; and as to the residue of his property, the testator leaves two-fifths to his daughter, Elizabeth Frances, and one-fifth each to his children, Joseph Procter, Mary Rebecca, and Edith Spear.

The will and two codicils of William Bruce Joy, M.D., F.C.P. in Ireland, late of 16, Pembridge-gardens, Bayswater, who died on January 28th last, have been proved by Mr. Albert Bruce Joy and Mr. George William Joy, the sons, the executors, the value of the personal estate exceeding £2400. The testator leaves to his wife, Mrs. Arminella Joy, all his furniture and effects, cash in the house and at his bankers, and an annuity of £300; to his son, Archibald Edward, an annuity of £250; and to Frederick James McDonnell, £100. Subject to the foregoing, he leaves his estate of "Joy's reclaimed Dam," Belfast, and his other estates in Ireland with the residue of his real and personal property as to two-thirds for his son, Albert Bruce, and as to one-third for his son, George William.

The Irish probate granted at Dublin of the will of Samuel Warren, M.D., late of Hoylake, Cheshire, and of 83, Grosvenor-square, Rathmines, Dublin, who died on Feb. 12th last, to Mrs. Frances Elizabeth Warren, the widow and sole executrix, has been resealed in London, the value of the personal estate in England and Ireland exceeding £1500. The testator gives, devises, and bequeaths all the real and personal estate which he shall die seized or possessed of to his wife absolutely.

The following legacies have recently been left to Hospitals and other medical charities:—Mr. Francis Parsons, of Ashford House, Hornsey, £500 each to St. Albans Dispensary and the Hemel Hempstead Infirmary.—Mr. Stephen Cooke, of Buckingham, £300 to the Cancer Hospital, Brompton; £200 to the Horton Infirmary, Banbury; and £100 each to St. Bartholomew's Hospital, Guy's Hospital, the Hospital for Women and Children, Vincent-square, Westminster, the new Hospital for Women, Marylebone-road, the Hospital for Consumption and Diseases of the Chest, Brompton, the Royal Hospital for Diseases of the Chest, City-road, the National Hospital for Paralysis and Epilepsy, Queen-square, Bloomsbury, the Royal London Ophthalmic Hospital, Blomfield-street, Moorfields, St. Peter's Hospital, Henrietta-street, and the Buckingham Nursing Hospital.—Mr. Robert Barbour, formerly of Manchester but late of Bolesworth Castle, Cheshire, £500 to the Chester General Infirmary.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Registration District of Bedwelty.—Mr. John Spear has recently re-inspected the urban sanitary districts of Ebbw Vale and Abertillery, and the rural sanitary district of Bedwelty, comprising the above area. He reports, with regard to the Ebbw Vale district, that a sewer has been laid at Cwm and another is in course of construction at Wainellwyd. At Chapeltown a plan for sewerage has been approved by the authority, and for Briery Hill plans are in course of preparation. It is proposed to defray the cost of these works out of the current rates, and the work will therefore be proceeded with very slowly. It is also intended that the sewage, unpurified, should be discharged into the Ebbw, a course to be deprecated. There has been considerable improvement since Mr. Spear's previous visit in 1882 in the matter of both privy accommodation and scavenging. New houses are now supplied with a closet of the Manchester pattern, and the pails are regularly emptied; but there are still some 2300 houses either without privy accommodation or with a provision of the worst kind. There is, however, no change in the water-supply, but there is some improvement in house construction. Mr. Spear points out methods by which older cottage property might be improved both as regards ventilation and prevention of dampness. Reporting on the Abertillery district, he refers to the prevalence of typhoid fever in 1882, 1883, and 1884, the result of excremental pollution of earth, air, and water. Little, however, had been done but the provision of a small amount of sewerage, and no proper efforts are made to improve the condition of houses.

In the Bedwelty rural district, Mr. Spear states that the sanitary condition of the villages is deplorable; in a few places attempts have been made to provide sewers, and there is a prospect of an improved water-supply, but the building bye-laws are not enforced, and no attempt is made to isolate infectious disease.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hanley Urban District.—On an estimated population exceeding 51,000, the birth-rate was 38·8 and the death-rate 21 per 1000, both rates exhibiting a decrease on the mean of preceding years. The infant mortality also last year showed a decline from the higher rates that obtained in 1882 and 1883, but it was still markedly in excess of the rates prevailing amongst other corresponding urban populations. The rate of death from the seven principal zymotic diseases was also high—namely, 3·6 per 1000, and 73 deaths were registered from diarrhœa and dysentery. Unfortunately the report, professedly relating to the "sanitary condition" of the borough, is little else than a record of statistics, and hence we are unable to judge of the conditions leading to preventable death, or of the advice which has been given in order to improve the state of the district. The action taken by the inspector of nuisances, as tabulated in an appendix, points to efficiency on the part of this officer.

Jarrow (Urban).—The medical officer of this borough in his report for 1884 expresses his belief that the lamentable depression of trade, and consequent distress among the working classes, had an appreciable effect upon the mortality statistics of the year. The population of the borough is estimated at 29,000, showing a higher rate of increase than prevailed between 1871 and 1881; that the population, however is not over-estimated appears probable from the fact that the birth-rate calculated upon the medical officer's estimate was equal to 43·9 per 1000. This rapid increase of population at a time of such heavy depression is a noteworthy fact. The death-rate, after the due addition of the deaths belonging to the borough recorded in the Union Workhouse outside the municipal boundaries, was equal to 23·5 per 1000; and, in spite of a considerable reduction in the mortality from zymotic diseases, showed a slight increase upon the rate in the previous year, and exceeded by 2·2 per 1000 the mean rate in the ten years 1873-82. Dr. Munro considers that there is a close relation between this increase in the death-rate and the existing "bad times," a conclusion supported by the fact that zymotic fatality, other than that due to infantile diarrhœa, had declined. Infant mortality, measured by the proportion of deaths under one year to births, was equal to 163 per 1000, and exceeded that which prevailed in any year since 1878, when the summer was hot and the fatality from infantile diarrhœa excessive, as was the case last year. The deaths from the principal zymotic diseases were equal to 3·8 per 1000 of the estimated population, and showed a considerable decline from the rates in the preceding two years, which were 5·0 and 5·1. It is noted that the annual zymotic death-rate in the borough during the five years 1874-78, before the introduction of the system of compulsory notification of infectious diseases, was 5·7 per 1000, whereas it has declined to 3·8 in the six years since notification was introduced. This is important evidence in favour of notification, although it would not be safe to attribute the decline entirely to this cause. In connexion with this subject it is to be regretted that very little progress appears to have been made during the past year in the provision of permanent hospital accommodation for infectious diseases.

Bedford Urban District.—Dr. Prior reports that Bedford continues to exhibit a very low death-rate, it having been 15 per 1000 last year; the zymotic rate was also only 1·5 per 1000. Diphtheria, which some years since prevailed so very widely, is still troublesome, but it is mainly confined to a comparatively small portion of the town lying south of the river. The various conditions, such as dampness, states of sewers and drains, &c., which might account for this localisation of the affection, have been carefully considered, and Dr. Prior is inclined to think that, after all, the circumstance is really due to the propagation of the disease by means of a series of mild and unrecognised cases in this special locality.

Willesden Urban District.—This district has now a population of over 36,000, and last year it achieved, notwithstanding its rapid increase of inhabitants, the end of attaining the smallest death-rate on record—namely, 14·6 per 1000. There was some increase in the amount of zymotic disease, but this was mainly due to a prevalence of whooping-cough, a disease against the spread of which no practical measures of prevention can as yet be regarded as available. Owing to a prevalence of small-pox, and to the failure of the authority to prepare themselves with proper means of isolation, hospital tents were procured, and subject to infectious disease not making its appearance at an unsuitable time of the year, the tents may be regarded as still available. An ambulance is very much needed, there being no proper means for the removal of patients. Dr. Branthwaite also suggests a chair for carrying the sick downstairs, but nowadays every proper ambulance is fitted with a movable stretcher which the patient is laid on in his bedroom, which is then made to slide into the ambulance, and on which he is carried from the ambulance to the hospital bed. If the recumbent position be unnecessary, the stretchers can always be so adapted as to suit other positions.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5443 births and 3594 deaths were registered during the week ending the 23rd inst. The annual death-rate in these towns, which had been equal to 20·2 and 20·4 per 1000 in the preceding two weeks, further rose last week to 21·1. During the first seven weeks of the current quarter the death-rate in these towns averaged 22·1 per 1000, against 23·0 in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 13·3 in Bolton, 17·3 in Bradford, 17·5 in Halifax, and 18·0 in Leicester. The rates in the other towns ranged upwards to 29·1 in Manchester, 30·0 in Newcastle-upon-Tyne, 30·1 in Preston, and 31·5 in Blackburn. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 481 and 463 in the previous two weeks, rose to 510 last week, and included 182 from measles, 158 from whooping-cough, 42 from diarrhœa, 40 from scarlet fever, 37 from "fever" (principally enteric), 34 from small-pox, and 17 from diphtheria. No death from any of these principal zymotic diseases was returned last week in Derby, whereas they caused the highest death-rates in Birkenhead, Blackburn, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Liverpool, Birkenhead, and Newcastle-upon-Tyne; from whooping-cough in Oldham, Plymouth, and Blackburn; from scarlet fever in Wolverhampton; and from "fever" in Cardiff and Norwich. The 17 deaths from diphtheria in the twenty-eight towns included 10 in London and 2 in Preston. Small-pox caused 66 deaths in London and its outer ring of suburban districts, exclusive of 22 deaths of London residents recorded in the hospital ships and camp at Darenth; also 2 in Manchester, 2 in Sheffield, 1 in Hull, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 1282, 1361, and 1364 on the preceding three Saturdays, further rose to 1374 at the end of last week; the admissions, which had been 315 and 211 in the previous two weeks, rose again to 282 last week. The Highgate Small-pox Hospital contained 68 patients on Saturday last, 15 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 287 and 291 in the preceding two weeks, further rose last week to 304, and were 5 below the corrected average. The causes of 62, or 1·7 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Bradford, Preston, and in four smaller towns. The largest proportions of uncertified deaths were registered in Sheffield, Halifax, and Bristol.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·6 and 23·4 per 1000 in the preceding two weeks, declined again to 21·2 in the week ending the 23rd inst., and was almost identical with the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 10·6 in Leith and 18·0 in Edinburgh, to 22·0 in Paisley and 24·7 in Glasgow. The 517 deaths in the eight towns showed a decline of 53 from the number in the previous week, and included 22 which were referred to whooping-cough, 16 to diarrhœa, 15 to measles, 8 to "fever" (typhus, enteric, or simple), 3 to scarlet fever, 3 to diphtheria, and not one to small-pox; in all, 67 deaths resulted from these principal zymotic diseases, against 55 and 79 in the preceding two weeks. These 67 deaths were equal to an annual rate of 2·7 per 1000, which was 0·3 below the mean rate from the same diseases in the twenty-eight English towns. The 22 deaths from whooping-cough in the eight towns showed a further decline from the numbers in recent weeks, and included 12 in Glasgow, 4 in Dundee, and 3 in Edinburgh. The 16 deaths attributed to diarrhœa were fewer by 3 than those in the previous week, but exceeded the number in the corresponding week of last year by 5. The fatal cases of measles, which had been 13 and 19 in the previous two weeks, declined again to 15 last week, all of which occurred in Glasgow. The 8 deaths referred to "fever" corresponded with the number in the previous week, and included 5 in Glasgow and 3 in Edinburgh. Two of the 3 deaths from scarlet fever, and 2 of the 3 from diphtheria, were returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 117 and 93 in the preceding two weeks, rose again to 107 last week, and were 7 above the number returned in the corresponding week of last year. The causes of 76, or nearly 15 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 28·5 and 35·0 per 1000 in the preceding two weeks, declined again to 31·2 in the week ending the 23rd inst. During the first seven weeks of the current quarter the death-rate in the city averaged no less than 32·6 per 1000, the mean rate during the same period not exceeding 20·8 in London and 18·4 in Edinburgh. The 211 deaths in Dublin last week showed a decline of 26 from the number in the previous week, and included 17 which resulted from measles, 6 from "fever," 6 from scarlet fever, 2 from whooping-cough, 1 from diphtheria, 1 from diarrhœa, and not one from small-pox. Thus, 33 deaths resulted from these principal zymotic diseases, against 22 and 34 in the preceding two weeks; these 33 deaths were equal to an annual rate of 4·9 per 1000, the rate from the same diseases last week being 3·1 in London and 1·7 in Edinburgh. The fatal cases of measles in Dublin, which had been 17, 12, and 14 in the preceding three weeks, rose again to 17 last week. The 6 deaths from scarlet fever, and the 6 from "fever" (typhus, enteric, or simple), also exceeded the numbers in recent weeks. The deaths from diarrhœa and whooping-cough, on the other hand, showed a decline. Three inquest cases and 2 deaths from violence were registered within the city; and 63, or nearly a third of the deaths, were recorded in public institutions. The causes of 22, or more than 10 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Amongst the officers who left Sawakin on the 22nd inst. in the *Calabria* was Surgeon P. A. Hayes, and amongst those who left in the *Ganges* on the 27th inst. was Surgeon N. Manders.

The following medical officers have arrived at Cairo, sick, from the Nile:—Surgeon-Major R. W. O'Donnell, and Surgeons R. H. Clements, W. S. Pratt, F. H. Treherne, and H. P. Birch, Medical Staff.

ADMIRALTY.—The following appointments have been made:—Staff Surgeon John Wilson, to the *Cormorant*; Arthur Keess, Esq., M.R.C.S., to be Honorary Surgeon to the Royal Naval Artillery Volunteers (London Brigade).

MILITIA MEDICAL STAFF.—Surgeon-Major Charles Wm. Marriott, 4th Battalion, the Royal Warwickshire Regiment, resigns his commission; also is permitted to retain his rank, and to wear the prescribed uniform on his retirement; Surgeon Herbert Goldingham Budd, 3rd and 4th Battalions, the Worcestershire Regiment, to be Surgeon-Major; Surgeon Duncan McFadyen, 2nd Battalion, the Queen's Own Cameron Highlanders, to be Surgeon-Major; Surgeon James Ramsey, M.D., 3rd Battalion, the Prince of Wales's Own (West Yorkshire Regiment), to be Surgeon-Major.

YEOMANRY CAVALRY.—Cheshire: Surgeon William Chas. Watson resigns his commission.

ARTILLERY VOLUNTEERS.—1st Cinque Ports: Captain Alfred Sparkes resigns his commission; Acting Surgeon Thomas Horne, M.D., resigns his appointment.—1st Worcester: William Herbert Packer, Gent., M.D., to be Acting Surgeon.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Lincolnshire Regiment: Thomas Porter Greenwood, Gent., to be Acting Surgeon.—10th Lanarkshire (Glasgow Highland): Quintin Chalmers, Gent., to be Acting Surgeon.—11th Middlesex (Railway): Isaiah George Butters, Gent., to be Surgeon. 3rd Lancashire: William Deans, Gent., to be Acting Surgeon.—1st Cinque Ports: John James Marshall, Gent., to be Acting Surgeon.

HOSPITAL FOR SICK CHILDREN.—At the thirty-third annual meeting of the governors of this institution on the 20th inst. it was stated that the number of in-patients admitted during the past year was 932, and that the out-patients receiving advice and medicine were 15,270. At the Convalescent Hospital, Highgate, 249 children had been received. The available income amounted to £9844, including legacies to the amount of £1650. The expenditure at both establishments amounted to £11,471, which included a portion of the outlay on alterations.

Correspondence.

"Audi alteram partem."

"PNEUMOTHORAX FOR HÆMOPTYSIS."

To the Editor of The Lancet.

Sir,—My object in trespassing upon your space is not to enter into the important question of the therapeutic value of the mode of treatment advocated by Dr. Cayley in his most interesting communication to the Clinical Society on the above subject, but simply to discuss how far the special method adopted by him is calculated to secure the desired end, the collapse of the lung; and I therefore venture to ask, What reason have we to believe that free incision into the pleural cavity through the chest wall is necessarily followed by collapse of the lung?

Theoretically, the desired result should be attained; when the atmospheric pressure acting through the larynx is neutralised by the pressure of the air upon the outer surface of the lung, the elastic force of the lung should be set at liberty to produce complete collapse of the organ and to restore it to its fœtal condition. "Thus," according to Hermann,[1] "*should, through any opening, air pass into the* space between the lungs and the thoracic walls, then the lungs by virtue of their elasticity collapse to their natural (atelectic) volume (pneumothorax)."

I venture to submit, however, that collapse of lung by no means necessarily follows the free admission of air into the pleural cavity. This has long been fully recognised. Mr. Erichsen, for instance, says,[2] "Collapse of the lung in wounds of the chest consequent upon the action of the atmospheric pressure upon the outside of the organ, has been more frequently spoken about than seen. The chest may be largely opened, and the full pressure of the atmosphere allowed to act on the outer surface of the lung, and yet no collapse of this organ takes place. The lung in such cases may be seen rising and falling at the bottom of the wound." In my own experience this is just what occurs when the thoracic cavity is freely opened in the treatment of empyema; in such a case the lung, provided that it is not bound down by adhesions, may be plainly seen rising and falling during respiration, just as described by Mr. Erichsen in the case of primary wound of the pleural cavity. When the opening is first made, indeed, the violent expulsion of the pus and the irritative cough dependent upon rapid expansion of the lung plainly indicate that what is taking place is the very opposite of collapse of the organ.

If it were a fact that free incision into the pleural cavity necessarily produced collapse of lung, the operation for the cure of empyema would be an exceedingly grave undertaking, on account of its inevitable after-effects. For since, on the one hand, the lung could not expand to meet the chest wall, and thus obliterate the pus cavity, unless the external opening were closed, and, on the other, the abscess cavity could not become obliterated unless the aperture were left open to allow of free drainage, it would of necessity follow that in the large proportion of cases the patients would be left with a lung in a condition of complete and permanent collapse and a chronic fistulous opening into the pleural cavity. It is well known, however, that such a result is not met with except in the most unfavourable cases, when the lung is already bound down by adhesions and the chest wall cannot fall in to the requisite extent.

Collapse, or, more correctly, compression, of lung as the result of pneumothorax occurs with certainty only when the air is pent-up in the pleural cavity; when it enters with inspiration and does not escape with equal freedom during expiration; and it is consequently met with by far the most often when perforation of the cavity occurs from the lung, in the absence of any free external opening; and it is well known that the urgent symptoms produced by such a condition may be at once relieved by thoracentesis, by which procedure the pressure of the air in the pleural cavity is reduced to that of the atmosphere.

A careful consideration of the details of the very important case brought forward by Dr. Cayley shows that the collapse of lung which was actually found post mortem may be explained in accordance with the above theory. For it is noted that during the treatment of the case the tube became blocked and pleurisy with effusion set in. The physical conditions for the induction of compression of lung were thus established.

I would therefore submit that if it is desired to produce collapse or compression of lung, air should be injected into the pleural cavity, as proposed by Mr. R. W. Parker and commended in your remarks upon the subject, rather than admitted by a free external opening, in order that a compressing force greater than that of the atmosphere may be secured, and the collapse of the organ may thereby be rendered certain.—I am, Sir, your obedient servant,

E. Markham Skerritt, M.D.Lond., F.R.C.P.,
Senior Physician to the Bristol General Hospital.
Clifton, May 26th, 1885.

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[1] Human Physiology, translated by Gamgee, p. 159.

[2] Science and Art of Surgery, vol. i., p. 494.

THE TITLE OF "DOCTOR" FOR LONDON MEDICAL STUDENTS.

To the Editor of The Lancet.

Sir,—The proposal of the Royal College of Surgeons to obtain power, in conjunction with the College of Physicians, to grant the title of "Doctor" to their licentiates and members in future must be unitedly opposed by graduates of recognised universities. Granted that there is a commercial value to the title, it would be manifestly unfair to those who have obtained it in a legitimate way to sow it broadcast in this manner. Of course, it is easy to see that it is the unblushing way in which the Licentiates of the Edinburgh and Glasgow Corporations have taken to themselves the title (which it has been proved does not belong to them) which has provoked the above resolution. Surely it is beneath the dignity of our English Colleges to follow in the footsteps of their unworthy compeers! What compensation is to be given to those who have taken the extra trouble and gone to considerable extra expense to gain a university degree in addition to the Membership of the College? Ought not a still higher title to be granted them, or else some distinguishing mark by which the public can gauge the different value of their "Doctorate"? Of course, to the public every medical man, from the lowly L.S.A. to the magnificent F.R.C.P., and consulting physician, is "doctor," in the same way that to the Irish peasantry every military man is "captain." If it be required that all medical men should start with equal degree in rank, baronetcies should be conferred on all, for there is no doubt of the extra commercial value of that title to medical men, and although this distinction has also been gained (by those medical men who hold it) by extra work, zeal, or skill, why should this levelling down process only begin at "doctor"?

Let the Council of the College admit their members to a share in its government, and alter its constitution, if necessary, to allow of this, and they will be doing a great work; but, as a member, I beg to protest against this attempt to destroy the value of university titles gained by those who have taken the extra trouble and work to procure them.

I am, Sir, yours truly,
C. St. John Wright, M.B.Aberd., &c.
St. Mary Infirmary, Islington, May 26th, 1885.

SMALL-POX RISKS AND REVACCINATION.

To the Editor of The Lancet.

Sir,—With reference to Mr. Goude's letter in your issue of the 16th inst., on the above subjects, and the paper read before the Society of Arts on the 8th inst., if you will kindly give me a little space in an early issue I shall be very happy to place before the profession, by means of your columns, the reasons which led me, as Mr. Goude puts it, to "publicly state his [my] disbelief in the necessity for revaccination in adults who have been efficiently vaccinated;" and to prohibit the practice of revaccination in the system of voluntary vaccination inaugurated by me in the first circle of the North-West Provinces in India in 1864. The practical experience and personal observation of thirty years' service in India, the home of small-pox, with the last twenty years of that service, I may say, almost entirely devoted to the subject of ascertaining the best prophylactic for small-pox, have satisfied me that no prophylactic can even approach vaccination; and when it is carefully supervised, and skilfully practised, and the system known as arm-to-arm vaccination, or what really amounts to it.

alone carried on, there is no necessity for revaccination. My opportunities for arriving at any conclusion on this most important subject will, I think, be allowed to be extensive and special, when I state that, during the last twenty years of my Indian service, I have been continuously engaged in vaccination in one sanitary circle, with a population of ten millions and an average of 500 to the square mile—with my vaccine work standing the test of small-pox as an annual visitor—with no attempt at isolation even in sporadic cases; on the contrary, with the promiscuous collection of cases of the disease in every stage of the eruption, with children, as yet free from it, at the shrine of the goddess of small-pox, "Sutla." Here, in the midst of all this small-pox contagion and infection, I have never protected (if I may use the term) my work by revaccinating a single native youth or adult, or permitted one of my two hundred subordinates to do it. If, therefore, revaccination is necessary in this country owing to the prevalence of small-pox among the vaccinated, I can point to towns, cities, and districts where small-pox is practically unknown, except in a few isolated unvaccinated cases, and ask, Why this difference? I will not, however, take up more of your space at present. All I ask from the numerous professional and unprofessional readers of your journal is a hearing and an opportunity of showing that Jenner's great discovery has gained by the lapse of time; and that in India it has by its own merit overcome every possible difficulty, and is gratefully accepted in the place of inoculation by a nation who have practised that prophylactic from time immemorial.

I am, Sir, yours faithfully,
R. PRINGLE, M.D.,
Late Sanitary Department, H.M.'s Bengal Army.

Blackheath, S.E., May 19th, 1885.

THE NEW LUNACY BILL.

To the Editor of THE LANCET.

SIR,—Without venturing an opinion on any of the points touched upon by the Lord Chancellor's new Bill, I would beg to direct your attention to a matter not therein referred to, and which, I think, calls as loudly as any other for reform. I refer to the power at present vested in the magistracy of sending a pauper lunatic to any other asylum in England than that in his own county should there not be room for him in the home establishment. Under this law hundreds of unfortunates are annually conveyed to far distant parts of the country. Their friends are poor, and have neither the time nor the money necessary for their visitation. So pauper lunatics are left in their affliction to mourn their unhappy lot; to live, and probably to die, in the midst of strangers, and to suffer in their declining years that feeling of desertion and utter loneliness which was until now supposed to be reserved for the criminal. The Commissioners in Lunacy expressed their disapproval of the system some years back, saying that it was the cause of very great hardship to the patients so transferred. Could not a clause be inserted in the Bill at present being considered making it compulsory that pauper lunatics should be kept and treated within the counties in which they are chargeable as paupers?—this to come into force at the expiration of a reasonable time, to allow of extra accommodation being provided when required. It is surprising that this matter has not yet been mentioned in connexion with the new Bill, seeing that it entails more misery and hardship upon the transported lunatic (and his friends) than almost any other provision of the existing lunacy laws.

I am, Sir, yours faithfully,
S. A. K. STRAHAN, M.D.

May 20th, 1885.

"PERSONAL EXPERIENCE OF COCAINE AS AN ANÆSTHETIC."

To the Editor of THE LANCET.

SIR,—In last week's issue you publish a letter from Mr. Wm. Copeland, M.R.C.S., of Staindrop, near Darlington, headed as above. In this letter Mr. Copeland states his belief that "he is the first member of the profession who has undergone a serious operation under the influence of the new anæsthetic." Whilst I sincerely congratulate Mr. Copeland upon the success of his case and Dr. Bell Taylor in having such an able advocate, I would point out that, in this neighbourhood at all events, Mr. Copeland is not the first member of the profession who has been operated upon for senile cataract under the influence of cocaine.

In February last I operated upon Dr. Welford, an eminent and much respected member of our profession in Sunderland. Dr. Welford, who perhaps at some future time may be induced to give his experience of the new drug, suffered no pain, and is now in the enjoyment of perfect eyesight.

I am, Sir, yours truly,
CHRISTOPHER S. JEAFFRESON.

Newcastle-on-Tyne, May 26th, 1885.

DEAR DR. JEAFFRESON,—I have just been told THE LANCET of last week publishes a case (Mr. Copeland, of Staindrop) as the *first* operation on a medical man in the north for removal of cataract under the influence of cocaine. Now, if this was done subsequent to Feb. 15th, 1885, it is *not* the first, for on that day you operated on my eye under cocaine, and successfully removed, without the slightest pain whatever, a cataract, "its success manifest in my writing this letter." With many thanks for your great kindness and skilful manipulation,

Believe me, dear Doctor, yours sincerely,
GEORGE WELFORD.

Cotherstone, Darlington, May 25th, 1885.

IRELAND.

(From our own Correspondent.)

HONOURS FOR THE MEDICAL PROFESSION.

THE rumours that several members of the profession in Dublin would receive distinctions from the Government appear to have been without foundation. The visit of the Prince of Wales to this country was a most successful one, and all classes vied with each other to make his stay agreeable. That they succeeded is conceded on all hands, and naturally it was expected by the profession here that the visit would have been marked by distinctions being conferred on some leading members of the medical profession. The honours, however, appear to have been doled out with no liberal hand. Dr. Wycherly, it is true, has been knighted; but this distinction was conferred solely on account of his holding the office of High Sheriff for the city of Cork. It may be argued that these matters rest with the Prime Minister, and not with the Prince of Wales. This may be correct; but, on the other hand, there can be no doubt that the slightest wish of His Royal Highness in these matters would at once have been attended to. At all events, the medical profession here must feel itself slighted at the indifferent manner in which it has been treated by the authorities.

HOUSING OF THE POOR COMMISSION.

On Saturday last the Royal Commission appointed to inquire into the housing of the working classes in Dublin commenced its duties under the presidency of Sir C. Dilke, M.P. The witnesses examined included the officers of the Local Government Board, the chairman of the Public Health Committee, Dr. Cameron, medical officer of health, and others. The proceedings, being private, cannot be published at present; but complaints have been made that the examination of four witnesses was conducted simultaneously, and that sufficient time was not devoted to the hearing of evidence by such an important Commission. It has also been alleged that although important evidence was tendered on the first day, it was declined on the ground of being "too late." Another sitting was held on Tuesday, but if carried out in the same manner, little good can be expected from its labours.

CORK SOUTH INFIRMARY.

The trustees of this infirmary have advertised for two surgeons and a physician, to be appointed on June 12th next, in accordance with a rule of the institution, which states that all officers of the staff appointed after 1876 shall cease to hold office at the end of five years, but shall be eligible for re-election. The objections to such an arrangement are many and manifest, and consequently the medical practitioners in Cork have recently held a meeting to take into consideration the question of these vacancies. The meeting appears to have been undivided in its opinions, as the resolutions were unanimously adopted. These resolutions stated that the medical profession in Cork considered the system of electing the staffs of the various hospitals for a limited period would tend to lower their status; and that no medical man should oppose the re-election of any member of a hospital unless he had been neglectful of his duties. These resolutions have been brought under the notice of the trustees of the infirmary.

ADELAIDE HOSPITAL.

The late Mrs. Bolton of Bective Abbey, County Meath, has bequeathed to this institution a perpetual rent charge of £400 a year, to be applied to the maintenance of some distinct ward or branch of the hospital, and to be called the "Bolton Donation."

A MORGUE FOR KINGSTOWN.

Kingstown, a seaport town some seven miles distant from Dublin, is greatly in want of a morgue for holding inquests, and as a receptacle for the bodies of persons found in the harbour. The coroner for the district has on several occasions drawn attention to the disgraceful neglect in providing such a building, but up to the present without success. The commissioners of the township are, I understand, the responsible authorities, and it is to be hoped they will take the necessary steps without delay to supply the defect.

The Earl of Rosse has been elected Chancellor of the University of Dublin.

On Monday last the Lord Mayor of Dublin formally opened the new baths and washhouses in Tara-street, which have been erected at a cost of £5000.

Dublin, May 26th.

PARIS.

(*From our Paris Correspondent.*)

THE LATE PROFESSOR BOUILLAUD.

THE statue that was erected in honour of Professor Bouillaud at Angoulême, his native town, was unveiled on Saturday, the 16th inst., in the presence of the notabilities of the place and of several members of the profession from Paris and elsewhere, most of whom were pupils of the illustrious physician. There were also present delegates from the various learned societies to which Dr. Bouillaud belonged—Professor Vulpian representing the Academy of Sciences, Dr. Henri Roger the Academy of Medicine, and Professor Laboulbène the Faculty of Medicine of Paris. In the most emphatic language the orators retraced the professional life of Dr. Bouillaud, commencing from his doctorate to the day of his death. He had scarcely left the school of medicine when he made an important discovery, showing the parts played by phlebitis, and the obliteration of the veins, in the production of certain forms of dropsy. He was not quite thirty years of age when he published his treatise on Encephalitis, in which he affirmed that the seat of articulate language is in the anterior lobes of the brain; at forty he published his Medical Nosography. His works on Essential Fevers, Medical Philosophy, and Acute Articular Rheumatism (in the latter of which he established the law of coincidence of inflammation of the sero-fibrous membranes of the heart, which opened a new field to pathology), and his treatise on Diseases of the Heart are sufficient to place Bouillaud among the members of the profession of the present century who have contributed by their works to create a new era in the practice of medicine. In 1826 he was promoted to agrégé of the Paris Faculty of Medicine; in 1825 he became member of the Academy of Medicine; in 1831 he was appointed hospital physician, and in the same year to the professorship of Clinical Medicine, which he occupied for nearly half a century with so much credit to himself and advantage to his pupils, who are now scattered over all parts of the civilised world. He was also a member of the Academy of Sciences.

THE ELIMINATION OF ARSENIC.

At the last meeting of the Paris Society of Medical Jurisprudence, Professor Brouardel reported a case illustrating the possibility of an infant at the breast being poisoned through its mother's milk. In his capacity of medical jurist he was consulted about a case which was lately brought before the tribunal, in which a man was accused of having attempted to poison his wife with arsenic, which he gave her in her food, she having at the same time a sucking baby. The infant was seized with symptoms of cholerine a few days after the mother had been affected in a similar way—diarrhœa, vomiting, &c., from which it died. These symptoms having occurred during the hot season, no importance was attached to them; but in the month of November following, the wife and mother-in-law of the accused having been again similarly affected, suspicions were aroused, and Professor Brouardel caused the body of the infant, which had been buried six months, to be exhumed. According to the Professor's report, the body was completely transformed into cadaverous fat, and it was impossible to isolate the viscera from the other parts, so that the body had to be analysed *en masse*. It weighed about two and a half kilogrammes, and contained five milligrammes of arsenic. Means had been taken to make sure that the arsenic did not come from the linen enveloping the corpse, nor from the earth which surrounded the coffin. The question then suggested itself as to whether the arsenic found in the body of the infant might not have been eliminated by the milk of the mother. To ascertain the possibility of such a circumstance, M. Gabriel Pouchet performed some experiments which were very conclusive. He administered to a certain number of wet-nurses, who were in the St. Louis Hospital affected with skin diseases, from two to twelve drops of Fowler's solution, and he ascertained that in these conditions the milk of the nurses always contained a relatively large quantity of arsenic; thus, the milk of one nurse, who had taken eight milligrammes of arsenic in six days, contained one milligramme of the metalloid to 100 grammes. M. Pouchet observed that these doses did not affect the nurses or their nurslings in the least. But upon the suppostion that the result might be otherwise if a large dose of the arsenic were administered at once, and in order to clear up this point, M. Pouchet tried experiments on some females among the lower animals. This series of experiments did not furnish conclusive results, as animals present a variable degree of susceptibility to arsenic, and it was therefore impossible to draw any comparative conclusions. It may, however, be deduced from these researches that the elimination of arsenic takes place principally through the milk, and it is therefore prudent never to administer arsenic to mothers suckling infants.

Paris, May 26th.

EGYPT.

(*From a Correspondent.*)

THE annual examinations at the Egyptian School of Medicine began on May 16th, and were attended on that day by his Highness the Khedive, all the Ministers, the Cadi, the Sheikh el Islam, and a few other visitors. The lecture theatre, which bears on its walls the names in Arabic of Hippocrates, Galen, Æsculapius, Asclepias, Dupuytren, Nélaton, Morgagni, and other classic names, together with those of some Oriental celebrities unknown to English ears, was luxuriously decorated in honour of the occasion. A fifth year's medical student was orally examined before the Khedive, then followed a fifth year's pharmaceutical student, who very rapidly discovered that three previously unknown solutions contained bichloride of mercury, acetate of lead, and nitrate of silver. Lastly, a Mussulman pupil midwife, closely veiled, was examined *vivâ voce* in her art, and was even made to apply the forceps to the dummy before the august assembly. The Khedive was then conducted over the new museums, which are a valuable nucleus for the future, and show a considerable improvement over their condition twelve months ago. One large room now contains valuable acoustic and other physical instruments, which were recently discovered packed away in an old storehouse, and are probably relics of gifts to the medical school in olden days by Dr. Clot Bey and Napoleon III. A medical tourist who recently visited Cairo has exposed the nakedness of the school of medicine in no sparing terms, but a glance at the accompanying figures will show that it is unfair to blame the professors for not providing efficient laboratories and museums. It will be seen that the whole income for the three combined schools of medicine, pharmacy, and midwifery reaches only £14,914, of which £2175 remain after paying for salaries and for the food and clothing of the students. Very little reform can be effected with this absurdly small sum.

School of Medicine and Pharmacy.		
Director	£900	
23 Professors and Assistants	5730	
35 Servants	866	
Food for Male Students	734	
Various Expenses	148	
		8378
School of Midwifery.		
4 Professors	282	
5 Servants	67	
Food for Female Students	167	
Various Expenses	8	
		524
Clothes for all Students	3993	
Teaching Materials	1837	
Furniture	90	
Small Expenses	92	
		6012
Total		£14,914

The income has been this year summarily reduced by £3000 in consequence of the general financial reform in Egypt, and it is greatly to the credit of the Director of the School that any of the recent improvements have taken place. He has succeeded in obtaining leave to spend £1000 this year on scientific instruments for laboratories, and it is to be hoped that the order which has already gone to Paris will contain elementary instruments of practical value, instead of being spent entirely in costly microscopes for demonstrating bacilli. Plans for building additional museums have also been drawn out, and £2000 of the necessary £10,000 has this year been placed at the disposal of the school authorities. It is satisfactory also to note that out of 150 students at present in the school 75 now pay £14 a year for the privilege of being educated. Formerly the Government bore the expense of all students, as their parents being mostly of the peasant class were unable and unwilling to contribute anything towards their education. Much unostentatious good work is being done at Kasiel Ain Hospital, which adjoins the Medical School. Mussulman women nurses are being trained for the first time, a system of house-surgeons and dressers has been started, and sawdust and corrosive sublimate dressings have taken the place of charpie and commercial carbolic acid. A new women's ward has been opened, and an operating theatre has been commenced, which will prove a great boon to both surgeons and students. During the last week the following interesting cases were admitted into the surgical wards:—

CASE 1. A Soudanese, who stabbed himself in the abdomen after an unsuccessful attempt to shoot an English soldier who passed him in the street. This man, when brought to the hospital, had three coils of large intestine, about two feet and a half in length, outside his abdomen. These were cleaned and returned, and he is recovering without a bad symptom. He probably consumes opium or hasheesh, and it is interesting to note that he required almost a gramme of opium in twenty-four hours to be put under the influence of the drug.

CASE 2. An Egyptian woman was brought in suffering from omental hernia without any covering, which had been exposed for a week, but had given rise to no abdominal symptoms. This patient was found walking about in the ward the day after the operation, and is rapidly recovering.

CASE 3. A fracture of the surgical neck and dislocation of the head of the humerus, not seen until three days after the injury. The dislocation was very easily reduced under chloroform.

At the beginning of this month a weak strumous child was operated on for swollen cervical glands at the earnest wish of its parents. On the seventh day after operation hæmorrhage occurred from a small branch of the external carotid, and this was readily controlled by the thumb of the native "probationer" nurse, who had only been under Dr. Milton's training for four months. The midwife when summoned also applied direct pressure to the wound, and was intelligent enough to refuse offers of perchloride of iron from a house-surgeon. When Dr. Milton arrived in the ward, he found the child pulseless and moribund. Injections of ether and other treatment proving useless, he at once bared his own elbow, drew off a sufficiency of blood, and injected it into the jugular of the patient, unfortunately not saving the child's life. Such a lesson as this is incalculably of more value to student doctors and nurses than any of the prolonged efforts of memory which most school teaching in Egypt requires, and it is by such individual acts of courageous self-sacrifice that the good name of Englishmen in Egypt is sustained, and a counterpoise may perhaps be effected to the unfortunate feebleness of administration of England in this country.

Cairo, May 20th.

ROYAL COLLEGE OF PHYSICIANS.

AN extraordinary Comitia of the College was held on the 28th inst., Sir W. Jenner, Bart., President, in the chair. The gentlemen nominated at the last meeting, and whose names appeared in our impression of the 2nd instant, were duly admitted to the Fellowship. The late Dr. John Thorburn of Manchester was one of the gentlemen elected, and sympathetic reference was made to the fact of his death by Dr. Priestley, on whose motion the College resolved to address a letter of condolence to the widow.

A letter was read from the Secretary of the Royal College of Surgeons with respect to the appointment of seven delegates from each College to confer on the question of granting the title of "Doctor" to persons who shall have obtained the licence of the College of Physicians and the diploma of the College of Surgeons. A memorial was also presented by Dr. W. Hickman, urging the desirability of a complete conjunction between the Colleges. The President nominated Dr. Wilson Fox, Dr. Ord, Dr. Norman Moore, Dr. Moxon, and Sir Andrew Clark, Bart., with the President and Registrar, to act as delegates from the College.

On the motion of Dr. Norman Moore, it was resolved to guarantee the sum of 200 guineas towards the expenses of publication of the manuscript notes (1616) of Harvey's Anatomical Lectures.

The consideration of the Report of the Council upon the Croonian Trust was resumed. It recommended that "the residue of the income from the Trust, after payment of the Croonian Lecturer, be invested, to form a fund for the establishment of a Professor of Anatomy and Physiology, the person holding such professorship to be called the 'Croonian Professor of Anatomy and Physiology,' and to hold such professorship for five years." After some debate the Report was referred to a Special Committee, consisting of the Members of the Council and those Fellows who had given notice of amendments.

A Report was read from a Committee upon the Lunacy Bill, especially in reference to the question of the signing of certificates in lunacy, and a discussion ensued.

MEDICAL NOTES IN PARLIAMENT.

Medical Officers of Irish Prisons.

IN the House of Commons on the 21st inst. Mr. Hibbert, in reply to Mr. Macartney, stated that the medical officers of Her Majesty's prisons in Ireland who gave evidence before the late Royal Commission received the same allowances as those paid to medical officers appearing as witnesses before other commissions and select committees. These allowances were calculated to cover professional losses, and that included the payment of a substitute where necessary.

Medical Act Amendment Bill.

Mr. Mundella, in reply to Mr. A. O'Connor, stated that he was not aware of any intention on the part of the Government to reintroduce the Medical Act Amendment Bill of last session, and was understood to add that he did not think such a step was probable.

Protection against Cholera.

On the 22nd inst., in reply to Dr. Cameron, Mr. G. Russell stated that he was aware that Dr. Ferran was testing at Alcira the efficacy of vaccination as a remedy against cholera, and he had seen a telegram from him containing a statement as to the facts contained in the question, and asking that a commission should be sent out. The Local

Government Board was considering whether it could comply with the request; but the telegram was only placed in his hands on the 21st inst., and there had been no time to come to a decision in the matter. If the Department thought it desirable to send out a commissioner, he would undertake to bring the matter under the notice of the Secretary of State for India, as India was even more interested than England in the prevention of cholera.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen passed the first part of the Professional Examination for the Fellowship at a meeting of the Board of Examiners on the 25th inst.:—

Edmund Vaudrey, St. George's and Edinburgh; James T. James, Middlesex; J. Bowring Lawford, McGill and St. Thomas's; Henry J. Blakesley, Birmingham; A. F. Gambell Codd, St. George's; Robert Heelis, St. Thomas's; Harry Littlewood, University College; Charles S. Blair, Newcastle and London.

(Candidates referred, 12.)

Passed on the 26th inst:—

G. Adlington Syme, Melbourne and King's College; Alfred H. Tubby and A. Sneyd Taylor, Guy's; A. Ward Collins, University College and Liverpool; Robert T. Kent, Edinburgh and Guy's; John W. Smith, Edinburgh; Leonard A. Bidwell, St. Thomas's; A. Hancock Middleton, Dublin; Hugh Smith, London and Guy's.

(Candidates referred, 11.)

Passed on the 27th inst.:—

W. H. Breffit Brook and Wilfred Balgarnie, St. Bartholomew's; Henry P. Dean and Cyril W. Jecks, University College; Walter R. Jordan, Birmingham; Francis S. Hawkins and H. Evelyn Crook, Guy's; Arnold F. Bradbury, Newcastle; William H. Tomlinson, Manchester; William R. Ackland, Charing-cross; Ernest Solly, St. Thomas's.

(Candidates referred, 9.)

The library of the College is closed for the present for the purposes of the Fellowship Examination. The lectures will be resumed on Monday, June 1st, by Professor Edward Lund, F.R.C.S., the subject being "Some of the Injuries and Diseases of the Head and Neck, the Genito-Urinary Organs, and the Rectum."

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 21st inst.:—

Jones, Oliver Wentworth, Madras Medical College.
Roberts, Hugh Jones, Guy's Hospital.

The following gentleman passed his examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise on the same date:—

Mallet, Thomas Charles, St. George's Hospital.

ON the 27th inst. Sir Charles Dilke addressed a crowded meeting of the Ladies' Sanitary Association at Dublin.

THE Queen has appointed John Foreman, Esq., medical officer of the Virgin Islands, to be a member of the Executive Council of those islands.

A MEETING, under the presidency of the Bishop of Bedford, was held on the 20th inst., for the purpose of aiding the East London Nursing Society.

IN the case of Page *v.* Harrison an order was recently made by the Divisional Court for a new trial, on the ground that the verdict for the plaintiff of £150 damages was against the weight of evidence. In the Court of Appeal on the 21st inst. the decision of the Divisional Court was affirmed.

CHARING-CROSS HOSPITAL.—The Queen has contributed a special donation of £50 towards the Triennial Festival Fund now being raised at Charing-cross Hospital for providing accident wards, a children's ward, and other improvements. The triennial festival dinner was held on the 20th inst. During the evening subscriptions amounting to about £6500 were announced.

SOCIETY FOR TRAINING TEACHERS OF THE DEAF.—The annual general meeting of this Society is to be held at the Training College, Elmhurst, Castlebar-hill, Ealing, to-day (Saturday). At 4 P.M. the annual exhibition of the pupils of the school will take place, when an opportunity will be afforded to visitors of witnessing the method of instruction and noting the progress of the pupils.

THE medical superintendent of the hospital ships *Atlas* and *Castalia* has issued a report regarding the work carried out on these ships in the treatment of small-pox patients in the metropolis.

AT the annual court of the governors and subscribers to the Victoria Hospital for Sick Children it was stated that the cost of the additional building decided upon would be about £4500, and of this amount only £3000 has as yet been collected.

PRESENTATION.—On the 15th inst. a marble time-piece with bronze side ornaments, and an illuminated address, subscribed for solely by the working classes of Darlington, were presented to Dr. Hern, late house-surgeon at the Darlington Hospital.

IT is stated on authority, says the *Australian Medical Journal*, that for the year ending December 31st, 1883, out of 11,173 births in South Australia, 9895 were successfully vaccinated, as shown by fees paid for returns. This is equal to 88·5 per cent. of registered births.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 21st inst. the following degrees were conferred:—Doctors of Medicine: William Collier, Jesus; Edward Ground, Downing. Bachelor of Medicine: William Foster, St. John's. Bachelor of Surgery: Alfred Francis Street, Trinity.—Mr. Henry Tempest Dufton has been elected to the Tancred Studentship in Physic at Gonville and Caius College.

NORTH-EASTERN HOSPITAL FOR CHILDREN.—From the report which was read at the seventeenth annual meeting of the supporters of this institution on the 18th inst., it appears that during last year the number of in-patients treated was 620, and the out-patients 14,249, as compared with 637 in-patients and 14,548 out-patients in 1883. The income of the hospital during the year from all sources, except legacies, amounted to £4225 being an increase of £65. The decrease of expenditure was about £70, taking into consideration outstanding accounts on Dec. 31st, 1884. Last year a debt was due to the bankers of £4000, which had been reduced this year by £200.

AT a meeting of the Holbeach Board of Guardians on the 8th inst., Dr. O'Meara, medical officer to the Sutton Bridge district, applied for an increase of salary. The applicant stated that his salary was £20 per annum, or a little more than 7*s.* a week. In his district there were forty paupers entitled to his services, and his patients of that class averaged ten per week and thirty bottles of medicine. The district was a scattered one, and he was compelled to drive hundreds of miles in the year to fulfil his duties. If a case occurred in one portion of the district needing daily attendance, he would be compelled to drive seventy miles a week, and expend 14*s.* a week in bridge tolls. The board declined to grant an increase.

UNIVERSITY COLLEGE.—The distribution of prizes to the successful students in the Faculty of Medicine at this institution took place on the 20th inst. The following are the principal awards:—Herbert Caiger obtained an entrance exhibition of £100, H. M. Fernando one of £60, and S. K. J. Brock one of £40. The Atchison scholarship was obtained by Raymond Johnson, as was also the Bruce medal. C. J. Arkle was awarded the Atkinson-Morley scholarship, and H. P. Dean the Cluff prize. In Practical Surgery, the Erichsen prize was obtained by E. H. Thane. In Physiology, G. E. Rennie, in the senior class, was awarded the gold medal, and C. H. Fernau and J. P. Parkinson silver medals, while in the junior class H. M. Fernando obtained a silver medal. G. E. Rennie obtained the gold medal in Anatomy, and C. H. Fernau and J. P. Parkinson silver medals, and in the junior division G. White was awarded a silver medal. In Medicine, F. W. Burton obtained the gold medal, and H. H. Brown and S. E. Holder silver ones. Raymond Johnson received the gold medal in Surgery, and E. H. Thane a silver one. In Practical Chemistry, H. W. Picton was awarded the gold medal; H. H. Cayley and H. B. Kitchin, silver medals. The Tuke medal in Pathological Anatomy, was awarded to Raymond Johnson. E. H. Thane received the gold and Raymond Johnson the silver Fellowes medals in Clinical Medicine; F. W. Gee obtaining a silver medal in the junior class. In Clinical Surgery, J. J. Lister obtained the Liston medal, and in Clinical Dental Surgery Raymond Johnson was awarded a prize.

North-Western Association of Medical Officers of Health.—At the monthly meeting of the members of this Association on the 14th inst. it was resolved, with regard to Mr. Phythian's paper on "Tenure of Office by Medical Officers of Health," that the hon. secretary should communicate with the Metropolitan Society of Medical Officers of Health and the Yorkshire and Midland Association, with a view to some united action being taken to remedy the unsatisfactory position of medical officers in this respect, and to suggest the formation of a joint committee to secure the desired alteration, and to ensure that such alteration should be embodied in any measure of local government reform introduced before Parliament. Mr. Vacher then read a paper on "*The Inspection of Meat Markets*," and a short discussion followed.

Bristol Medical School.—The annual exhibition of prizes to the students of this school took place on the 18th inst. The principal awards were as follows:—Summer Session: Practical Chemistry, Mr. Henry Hamilton. Practical Physiology and Histology, Mr. Frederick Lace. Botany, Mr. Theodore Mayo Stiles; *Lecturer's Prize*, Mr. Herbert John Thomas. Materia Medica and Therapeutics, Mr. John Henry Fardon; *Lecturer's Prize*, Mr. Henry Hamilton. Obstetric Medicine, Mr. Herbert Alfred Burleigh. Practical Surgery, Mr. Francis Frederick Jones. Medical Jurisprudence, Mr. Alfred John Tomkins. Winter Session: Anatomy and Physiology (junior classes), Mr. Samuel Wolferstan Morgan. Senior Class of Anatomy, Mr. Theodore Mayo Stiles. Senior Class of Physiology, Mr. Theodore Mayo Stiles. Practical Anatomy, Mr. F. Lace. Chemistry, Mr. Chas. Meaden. Medicine, Mr. W. C. Swayne. Surgery, Mr. Harless Frederick Semple and Mr. Walter Carless Swayne (equal).—Bristol Royal Infirmary: Suple Medical Prize, Mr. John Ernest Trask. Suple Surgical Prize, Mr. Charles Edward Stuart Flemming. Crosby Leonard Prize for Proficiency in Surgery, Mr. John Ernest Trask. Tibbits Memorial Prize, Mr. William Connor Lysaght. Clarke Prize, Mr. Henry Frederick Semple. Pathological Prizes, Mr. Charles Edward Stuart Flemming and Mr. John Ernest Trask (equal).—Bristol General Hospital: Martyn Memorial Entrance Scholarship, Mr. Wm. Henry Ware. Clarke Scholarship, Mr. Wilfred Martin Barclay. Sanders Scholarship, Mr. Arthur Nicholas Little and Mr. John Bartlett Webb (equal). Lady Haberfield Prize, Mr. John Bartlett Webb.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Beddoes, T. P., M.R.C.S., has been appointed Clinical Assistant in the Skin Department, St. Thomas's Hospital.

Burford, Geo. Henry, M.B., C.M.Aber., has been appointed Assistant Medical Officer to the Crumpsall Workhouse and Receiving Wards, New Bridge-street, Township of Manchester.

Edlin, Holburton, F.R.C.S.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Compton-Gifford Urban Sanitary District, Devonshire.

Elder, George, M.D., C.M.Glas., has been appointed Surgeon to the Samaritan Hospital for Women, Nottingham.

Evans, Robert, M.R.C.S., L.R.C.P.Ed., has been appointed Assistant Medical Superintendent to the Hackney Union Infirmary, vice Dr. Fuller, resigned.

Gordon, T. E., M.B.Dur., has been appointed Resident Surgeon to the Birmingham General Dispensary, vice H. Shillito, M.B.Lond., resigned.

Garry, C. D., M.B., L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

Griffith, A. Hill, M.D.Aberd., has been appointed Assistant-Surgeon to the Manchester Royal Eye Hospital.

Harries, Arthur, M.D., Senior Assistant-Physician to St. John's Hospital for Diseases of the Skin, has been appointed Consulting Physician to the Association for the Supply of Pure Vaccine Lymph.

Houghton, Lambert, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer of Health for the Amersham Rural Sanitary District, vice Hosegood, whose appointment has expired.

Hull, Walter, M.B., L.R.C.P., M.R.C.S., has been reappointed House-Surgeon to St. Thomas's Hospital.

Johnson, G. D., L.R.C.P., M.R.C.S., has been appointed Ophthalmic Clinical Assistant to St. Thomas's Hospital.

Kidd, H. Cameron, L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Ear Department, St. Thomas's Hospital.

[illegible], Robert W., B.A., M.B.Cantab., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Kendal District Union and Workhouse, and Public Vaccinator to the Kendal District.

[illegible], Alexander, M.B., C.M.Glas., has been appointed Medical Officer for the Llanelly District of the Crickhowell Union.

Lucas, Samuel Adams, L.R.C.P., L.R.C.S.Ed., has been appointed Medical Officer for the Second District of the Parish of Liverpool, vice Kennedy.

Lyon, T. Glover, M.A., M.D.Cantab., L.R.C.P., M.R.C.S., has been appointed Non-resident House-Physician to St. Thomas's Hospital.

Macdougall, Aymer R., M.B.Ed., M.R.C.S., has been appointed Surgeon to the Chesterfield and North Derbyshire Hospital.

Petherick, Wallace, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Hopton and Hepworth District of the Thetford Union, vice Gurdon.

Priestley, Joseph, B.A., M.B., M.R.C.S., has been appointed Resident Medical Officer to the Chelsea Hospital for Women, vice James Harper, M.D.Lond.

Plowman, S., L.R.C.P., M.R.C.S., L.S.A.Lond., has been appointed Clinical Assistant in the Throat Department, St. Thomas's Hospital.

Rees, Hugh, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Menai Bridge Urban Sanitary District.

Ritchie, E. D., B.C.Cantab., M.R.C.S., L.S.A.Lond., has been appointed Assistant House-Surgeon to St. Thomas's Hospital.

Roberts, Edward, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon to the Manchester Royal Eye Hospital, vice A. Hill Griffith, M.D.Aberd., resigned.

Robinson, H. B., L.R.C.P., M.R.C.S., has been reappointed Resident House-Physician to St. Thomas's Hospital.

Rouse, Rolla E., M.B., M.R.C.S., L.S.A.Lond., has been appointed Resident Accoucheur to St. Thomas's Hospital.

Sanctoshi, Y., L.R.C.P., M.R.C.S., has been appointed Non-resident House-Physician to St. Thomas's Hospital.

Staddon, J. R., L.R.C.P., M.R.C.S., has been appointed Assistant House-Physician to St. Thomas's Hospital.

Stevens, Arthur Frederick, M.R.C.S., has been appointed Medical Officer for the Sapistone District of the Thetford Union.

Vachell, R., M.D., has been appointed Out-patient Medical Officer to the Glamorganshire and Monmouthshire Infirmary and Dispensary, vice T. Wallace, M.D., resigned.

Van Buren, Ernest C. Haward, L.R.C.P.Ed., M.R.C.S., has been appointed Assistant Medical Officer to the Workhouse of St. Mary Abbotts, Kensington, vice Atkinson.

Wallace, T., M.D., has been appointed Surgeon to the Glamorganshire and Monmouthshire Infirmary and Dispensary.

Williams, R. M., L.R.C.P., M.R.C.S., L.S.A.Lond., has been appointed Resident House-Physician to St. Thomas's Hospital.

Wilson, Arthur Cobden Jordan, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Penistone District of the Penistone Union, vice Watson.

Births, Marriages, and Deaths.

BIRTHS.

Austin.—On the 25th inst., at West Norwood Lodge, Knight's-hill, Lower Norwood, the wife of J. A. Austin, M.D., prematurely, of a son (stillborn).

Collenette.—On the 6th inst., at Silverdale, Staffs., the wife of F. de Beauchamp Collenette, L.R.C.P.Lond., &c., of a daughter.

Lucy.—On the 20th inst., at The Elms, Enfield, the wife of William C. Lucy, M.D., C.M., of a son.

Pratt.—On the 15th inst., at Gibraltar, the wife of Surgeon W. Simsen Pratt, Army Medical Staff, of a daughter.

Pritchard.—On the 25th inst., at Heath-rise, Hampstead, the wife of Urban Pritchard, M.D., F.R.C.S., of a son.

Wade.—On the 21st inst., at the County Asylum, Wells, Somerset, the wife of A. Law Wade, M.D., Superintendent, of a son.

Ward.—On the 24th ult., at Neemuch, Central India, the wife of Surgeon-Major E. C. R. Ward, F.R.C.S.I., Medical Staff, of a daughter.

MARRIAGES.

Edwards—Kemp.—On the 9th inst., at Tientsin, China, E. Henry Edwards, M.B., C.M., to S. Florence, third daughter of the late G. T. Kemp, of Beechwood, Rochdale.

Jones—Cole.—On the 30th ult., at St. Mary's Church, Brighton, Hermann Johnston Jones, M.D., M.R.C.S.Eng., L.R.C.P.Lond., to Hannah Cole, of Notting-hill, W.

Morgenrood—Reid.—On the 25th ult., at Capetown, Edward Henry Morgenrood, M.D., son of the late Philip Morgenrood, of Wynberg, Cape Colony, to Marian Beatrice (Minnie), youngest daughter of Wm. Wardlaw Reid, of Corra Linn, South Norwood, Surrey.

DEATHS.

Baker.—On the 19th inst., at his residence, Barham House, Leamington, Robert Large Baker, M.D., F.R.C.S., formerly of Birmingham, aged 65.

Budd.—On the 21st inst., at Southernhay, Exeter, Samuel Budd, M.D., J.P., in his 79th year.

Greensill.—On the 14th inst., at "The Firs," Martley, Worcester, Joseph Moore Greensill, M.R.C.S., &c., aged 28.

Lesly.—On the 29th inst., at Abu-Fatmeh, on the Lower Nile, of enteric fever, Robert Lesly, M.D., Army Medical Department, the youngest son of the late William Sole, M.D., F.R.C.S., and of Anne, his wife, now of St. Mary's, Southampton, aged 29.

Nicholls.—On the 27th inst., at Devizes, J. F. Nicholls, M.D., aged 65.

Thorburn.—On the 27th inst., at his residence, Moss House, Rusholme, John Thorburn, M.D., Professor of Obstetric Medicine in the Owens College, Victoria University, Manchester, aged 51 years. Friends will please accept this the only intimation.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

Monday, June 1.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 P.M., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 P.M., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 P.M., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Royal College of Surgeons of England.—4 P.M. Prof. Edward Lund: On some of the Injuries and Diseases of the Head and Neck, Genito-Urinary Organs, and Rectum.

Royal Institution.—5 P.M. General Monthly Meeting.

Odontological Society of Great Britain.—8 P.M. Casual communications by Messrs. W. St. George Elliott, C. W. Dunn, A. Maggs, S. J. Hutchinson, and F. Canton.—Mr. C. S. Tomes: On Experiments on Amalgam Fillings.—Dr. G. Field: Pivot Teeth attached by Cohesive Gold.

Tuesday, June 2.

Guy's Hospital.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

St. Thomas's Hospital.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

Cancer Hospital, Brompton.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

Westminster Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 2.30 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Royal Institution.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

Wednesday, June 3.

National Orthopædic Hospital.—Operations, 10 A.M.

Middlesex Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

St. Mary's Hospital.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.

London Hospital.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 P.M.

University College Hospital.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

Royal Free Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 3 to 4 P.M.

Royal College of Surgeons of England.—4 P.M. Prof. Edward Lund: On some of the Injuries and Diseases of the Head and Neck, Genito-Urinary Organs, and Rectum.

Obstetrical Society of London.—8 P.M. Specimens will be shown. Dr. John Williams: *Serous Perimetritis.*—*Dr. Matthews Duncan*: The Hypertrophies of Lupus of the Female Pudendum.—Mr. W. S. A. Griffith: Notes on a Specimen of the Pseudo-Osteo-Malacic Pelvis of Naegele.

Thursday, June 4.

St. George's Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

North-West London Hospital.—Operations, 2.30 P.M.

Royal Institution.—3 P.M. Prof. C. Meymott Tidy: Poisons.

Ophthalmological Society of the United Kingdom.—8 P.M. Living Specimens.—8.30. P.M. Adjourned Discussion on the President's paper on Reflex Ophthalmitis.—Mr. Spencer Watson: Intra-ocular Gumma in a Child the subject of Inherited Syphilis.—Mr. J. B. Lawford: Tubercle of Choroid —Dr. W. A. Brailey: Double Retinal Glioma resulting in the Shrinking of one Eye and the Perforation of the other by a large Growth from within.—Communication by Mr. G. A. Critchett: Case of Extreme Retinal Irritability with Abnormal Visual Phenomena.

Friday, June 5.

St. George's Hospital.—Ophthalmic Operations, 1.30 P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 2 P.M.

Royal College of Surgeons of England.—4 P.M. Prof. Edward Lund: On some of the Injuries and Diseases of the Head and Neck, Genito-Urinary Organs, and Rectum.

West London Medico-Chirurgical Society.—8 P.M. Dr. J. Syer Bristowe: Hysteria and its Counterfeit Presentments (Cavendish Lecture).

Royal Institution.—9 P.M. Prof. Dewar: Liquid Air.

Saturday, June 6.

King's College Hospital.—Operations, 1 P.M.

Royal Free Hospital.—Operations, 2 P.M.

Middlesex Hospital.—Operations, 2 P.M.

Royal Institution.—3 P.M. Rev. C. Taylor: "*The Teaching of the Twelve Apostles,*" an Ancient Document, with Illustrations from the Talmud.

METEOROLOGICAL READINGS.

(*Taken daily at 8.30 a.m. by Steward's Instruments.*)

The Lancet Office, May 28th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
May 22	29·21	S.E.	49	48	82	55	47	·37	Raining
„ 23	29·64	W.	54	49	108	59	45	·13	Cloudy
„ 24	29·91	S.W.	56	49	100	61	45	·13	Cloudy
„ 25	30·17	S.W.	55	49	74	57	45	...	Raining
„ 26	29·93	W.	57	54	93	66	49	·10	Overcast
„ 27	30·00	W.	57	54	112	72	54	...	Overcast
„ 28	29·90	W.	66	60	...	...	56	...	Cloudy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of The Lancet *to be addressed "To the Publisher."*

Medical Men in New South Wales.

From *information published by the* Immigration Office, Sydney, New South Wales, it appears that in the cities and larger townships of the Colony there is no lack of competent medical men, but in the newer and more remote districts they are too often conspicuous by their absence, and it is by no means unusual for the inhabitants of such places to advertise their willingness to guarantee a certain amount of income to a resident doctor. An experienced medical man, willing to "rough it" for a few years, will attain a competency much more rapidly than in England, especially if devoted to his profession and skilled in the treatment of complicated cases. Medical specialists possess a wide field in Australia, where institutions for the treatment of eye and ear diseases, &c., are practically unknown.

Mr. E. E. Wadbrook is referred to a general notice at the head of this column.

COCAINE TABLETS.

To the Editor of The Lancet.

Sir,—I can fully confirm Dr. Dolan's experience of the value and efficacy of the cocaine tablets. I have recently made some observations with them, which I trust may be of interest. I dissolved one of the one-sixth-grain tablets in three minims of water, and introduced it into my left eye. There was no pain or irritation; but in from two to three minutes there was well-marked anæsthesia, so that I could touch the conjunctiva with the point of a sharp penknife without experiencing inconvenience. In five minutes dilatation of the pupil was noticed, and at the expiration of ten minutes it was complete, there being at the same time paralysis of accommodation. The anæsthesia lasted for thirty-five minutes, and the dilatation for four hours. With the one-tenth-grain tablets the symptoms were of the same nature, but less pronounced. I find, with Dr. Dolan, that it is not necessary to dissolve the tablets in water, but that they may be introduced directly into the eye without inconvenience. I have used them frequently in the casualty department with most gratifying results. They are admirably adapted for the removal of foreign-bodies from the eye, the pain and photophobia being at once allayed. In one case especially, where the patient's eye was full of unburnt gunpowder, the result of an explosion, the relief was very marked. Injected hypodermically, a ligature having been previously applied to a limb, these tablets induce an amount of local anæsthesia sufficient for the performance of small operations, such as the opening of an abscess. I have never seen any untoward effect from the use of the drug, and have myself taken as much as three grains at a dose hypodermically without inconvenience. In the treatment of neuralgia of the eyeball cocaine is, in my experience, by far the best remedy.—I am, Sir, your obedient servant,

Eber Caudwell,
Assistant House-Surgeon to the Westminster Hospital.

May 26th, 1885.

The Case of Strangulated Hernia at Stockport.

In an annotation in our issue of the 9th inst. we directed attention to a case of umbilical hernia reported in the daily papers. The observations there made were suggested by the evidence which reached us, and we took occasion to state that we might not have been fully informed of the facts. From information since received, it appears that Mr. Buist succeeded twice in reducing the rupture within a few days of the suddenly fatal issue. Herniotomy for strangulated umbilical rupture is an exceedingly unpromising procedure; and yet we think it preferable to leaving the patient to the chances of spontaneous reduction when taxis has failed. Such cases are indeed difficult to deal with, and for that reason we freely admit that at most Mr. Buist committed an error of judgment in not consulting some senior member of the staff of the Stockport Infirmary, of which institution he is a valued officer. It is matter of regret that a post-mortem examination was not made, and the pathological facts placed beyond surmise.

L.R.C.P.—Our advertising columns often contain announcements of the kind indicated. Otherwise we know of no such institutions save those enumerated in the Medical Directory.

Mr. Arthur T. H. Trevor is thanked for his correction of a quotation.

Dr. Cobbold.—Too late.

"NO DOCTORS AMONG THE PEERS."

To the Editor of The Lancet.

Sir,—I was greatly struck by an annotation under this heading which appeared in The Lancet of the 16th inst. It seems to me that unless the leaders of the profession of medicine and surgery make a decided stand for their dignity misconceptions will continue to exist with regard to the true status of the profession. When medicine and surgery were practised by illiterate men, who were barbers as well as bleeders, there was perhaps an excuse for the absence of State recognition. But now there is an impassable barrier to prevent such persons being identified with the "healing art." Our noble profession can only be entered as the result of a thorough course of practical training and of passing a series of searching examinations at universities or colleges. Hence it is that at the present day its members include men of the highest intellectual culture and social position; men who have made their mark in the world of science by their discoveries and research for the alleviation of human suffering and the preservation of human life. I allude to such men as Jenner, Paget, Gull, Lister, Spencer Wells, Clark, Bowman, Playfair, Thompson, and many others. With such illustrious names I fail to see why science should not be represented among the peers as a tribute to science, just as literature is represented, and indeed all the learned professions. Moreover, I fail to see why the profession of medicine should not hold at least as high a place in the public estimation, and therefore in that of the State, as any other profession; as, for instance, the Army, the Navy, the Bar—ay, even the Church itself. But as regards State recognition, the medical profession, in comparison with the others, comes last of all. Again, in the House of Commons, while there are upwards of 120 barristers and 100 military men, there are only four medical men. The public can easily judge what a gain it would be to the community to have the benefit of the experience of medical men in legislating for the prevention of disease and the promotion of the health and comfort of the working-classes. How many important medical subjects are continually being discussed in that legislative council from time to time?—in many instances decided by those whose knowledge must be immeasurably inferior to that of men who have devoted their lives to the subjects in question. Among the many subjects about to be brought before Parliament, and which emphatically demand the best attention of a sound medical opinion, are the following:—The Medical Acts Amendment Bill; the health and management of prisoners; the treatment of habitual drunkards; overcrowding, and the proper housing of the working-classes in cities; the further restriction as to the pollution of rivers; the opposition to compulsory vaccination; and last, not least, the vivisection question.

For the foregoing reasons I repeat that our scientific profession—shall I not say the most scientific and enlightened of the present day—should be properly and fairly represented in both Houses of Parliament, as are the sister professions, to assist in deciding great and momentous questions. It seems to me that nothing but the blindest prejudice—a prejudice unworthy of enlightened statesmen—can have so long stayed the hand of the Sovereign, and prevented the elevation of the representative men of our order to seats in the Upper House, which Lord Salisbury once told the country "was chiefly valuable because it represented success in all lines of public usefulness, from commerce to statesmanship." The late Lord Beaconsfield, too, stated, in a speech delivered on Nov. 9th, 1875, that "a policy that diminishes the death rate of a great nation is a feat as considerable as any of the decisive battles of the world." The present Prime Minister, Mr. Gladstone, has frequently spoken in strong terms of his admiration of the increasing importance of medicine and the medical and surgical professions. "That profession," he said, "presented a future of the highest interest. There was in that future the probability that it would gain increased influence, greater as compared with other professions."

The remarkable incident recently reported, of a peer requiring medical assistance in the House of Lords, when Lord Spencer, with great presence of mind, secured the services of a professional commoner from the Lower House, is certainly not my reason why life medical peerages should be created in the same way as legal life peerages have been; but I take the far higher ground—the rights of the medical profession to equal rank and position with any other. If the rights of the profession are not acknowledged, then we ought to endeavour to induce more of its members who can afford it to enter the House of Commons, and, by well-directed combination, show the State that the profession has a political influence if it chooses to exercise it.—I am, Sir, yours truly,

Lambert Hepenstal Ormsby,
M.D.Univ. Dub., F.R.C.S.
Dublin, May 23rd, 1885.

To the Editor of The Lancet.

Sir,—With reference to the annotation in your issue of the 16th inst., under the above heading, I beg to express my full accord with your sentiments. Nor do I suppose that many of our body would dissent. Although the powers that be may think that to give a doctor a baronetcy is an honour to the profession sufficient to its needs, still I venture to submit that we honour the powers by accepting it. And so far from feeling hurt at the Premier's remark that you quote, I think we may well afford to treat it as an ignorant and childish insult. For though in whatever country we may practise we are subject to the laws of that country, still our interests do not cease there. We are all the world over members of the same united body, which has for its aim the consummation of science and art in their relation to humanity, the imitation of the highest attribute of the Deity. And as such we can happily remain unhonoured by those who are unable to conceive our high and noble aims, and *sine honore* we need none of us hesitate in feeling our superiority over any of our patients be they kings or paupers. Earthly honour we seek not, we seek but a clear conscience and a true understanding of the Supreme Being.—I am, Sir, yours obediently,

"Magnum et Gloriosum est pro Professione Vivere."
May 2[illegible]th, 1885.

The University of Naples.

The number of students entered at the University of Naples for the current scholastic year is 3527. Of these, 1472 are law students, and 1353 students of medicine, the remainder being distributed through the scientific and classical schools.

J. W. (Stoke-on-Trent).—We do not prescribe. Avoid advertising quacks.

An Old Subscriber.—We regret we have not the information at hand.

Mr. Bellamy.—Yes.

COCAINE IN HAY FEVER.

To the Editor of The Lancet.

Sir,—In your issue of May 16th one of your correspondents asks whether the application of a weak solution of cocaine to the conjunctivæ and the mucous membrane of the nose would be likely to prove beneficial to sufferers from hay fever. Within the last three weeks I have had two cases which would seem to indicate that the remedy in question might fairly be tried, and with a reasonable prospect of success. The first case was that of a lady who for three weeks had suffered from neuralgia, in which the supra-orbital and infra-orbital nerves were affected. Under treatment she made a good recovery, save that on the right side of the nose, at the junction of the bone and cartilage, there was left a constant aching so severe in character as to prevent rest or sleep. I ordered the affected part to be painted with a 2 per cent. solution of cocaine every twenty minutes; after the fifth application the pain entirely ceased. The cocaine was also applied to the mucous lining of the nostril on the affected side. Five days ago another lady consulted me for a painful affection of the nose on the right side, the pain radiating underneath the eye. It came suddenly, and disappeared suddenly, three or four times in the course of twenty-four hours, and was invariably preceded by severe fits of sneezing. This lady assured me that she sometimes sneezed as many as twenty times consecutively. I ordered the nose and cheek to be painted with a 2 per cent. solution of cocaine, and the mucous membrane of the affected side to be brushed over with the same. After four applications, the sneezing became less violent, and for two days she was free from the annoyance. I think the cocaine solution has been beneficial, and in such cases should be tested. In cases of hay fever it is worthy of a trial; but I should, in the first instance at least, confine its application to the lining membrane of the nose.

I am, Sir, yours respectfully,
A. G. Russell.
Strathmore, Harrogate, May 21st, 1885.

THE VOLUNTEER MEDICAL SERVICE.

To the Editor of The Lancet.

Sir,—"A Volunteer Surgeon" asks, in your issue of the 16th inst., to be recommended the books containing the details necessary to be acquired in order to obtain the pass certificate for Volunteer surgeons. As the requirements have increased considerably during the last few years, I would advise your correspondent to apply direct to the principal medical officer of his district, who will give every assistance in his inquiries. The present requirements necessitate a knowledge of all the details of the bearer company, general hygiene of a camp, medical aid in the field, and the regulations connected with military hospitals as detailed in the Medical Regulations, which unfortunately are out of print. A new edition of the "Stretcher-bearer Drill" now general in the Volunteer force is about to be issued. A knowledge of this drill in all its details would also be required. Many of the minor matters connected with marches, diet, filtration of water, &c., are discussed in Parkes' Hygiene, which work, with the hospital portion of Longmore on Gunshot Wounds, is recommended to be obtained.—Yours truly,

A Volunteer Surgeon-Major.
May 2[illegible]th, 1885.

DOCTORS *v.* PHYSICIANS.

To the Editor of THE LANCET.

SIR,—In your issue of the 25th ult. appeared two letters on the above topic. As they are written in much the same strain, they may conveniently be considered together. An attempt is made to create, or to encourage, an unfriendly spirit, by advising the use of mean expedients by the holders of one qualification to depreciate and annoy the possessors of another. Let the M.D. of somewhere consider himself vastly superior to his neighbouring L.R.C.P.Lond. if he likes; but he certainly has no right to employ every available opportunity for using either the snub direct or oblique, as recommended by one of your correspondents. With your permission, I will recount a tale and point a moral.

A few years ago I entered one of the largest London hospitals, having previously had two years' training at a public dispensary in the metropolis. I thought that in due course I should be able to get a doctor's degree. I found, however, the London University closed to me, unless I gave up a deal of valuable time to reading for the Preliminary Scientific examination. Deeming that my object in entering the hospital was to render myself a trustworthy practitioner of medicine rather than the temporary possessor of biological minutiæ, I resolved to give up the quest, and to go in for the L.R.C.P.Lond. and M.R.C.S., the only good qualifications open to me without interrupting my studies by leaving London. Some of my fellow-students, with an amount of worldly wisdom, seeing not only that the London degree was impossible for them, but that the London Colleges were beyond their reach, went to Scotland, where they and their fees were welcomed; and in due time these men returned with their M.B., C.M., only to wait a short time, when they would without any effort ripen into the higher degree. Now, only one of these graduates held any clinical appointment at the hospital, and, with that one exception, they would be classed among the *non-industrious men of their year. In the meantime, many of us* remained in London, steadily working through the clinical appointments and getting our qualifications.

I will now ask, Why are we, who are every whit as well educated and professionally qualified as the majority of M.D.'s, and better than some, to be spoken of as *little* better than impostors because we elected not only to commence but to pursue our professional education in London rather than elsewhere? It may be remarked in passing that even the M.R.C.P. is closed to us, as the holder of it is precluded from general practice. I trust the time is not far distant when we physicians will be taken out of our present false position and given a title of some real value. It is certain that if something is not done in this direction our London schools will wane with increasing rapidity.

I am, Sir, your obedient servant,

May 20th, 1885. PHYSICIAN AND SURGEON.

SYPHILITIC INDURATION OF A CICATRIX RESEMBLING MORPHŒA.

To the Editor of THE LANCET.

SIR,—The *following case is of some interest as indicating* a possible close connexion between morphœa—especially those cases which disappear comparatively rapidly—and syphilis.

A. B——, aged forty, had the left arm injured by cogwheels, the skin and cellular tissue on the outer side near the elbow being divided by several parallel cuts. About a month after the wounds had completely and soundly healed the cicatrix became indurated, and instead of being thin and soft, appeared half an inch or more in thickness, and closely resembled morphœa. I found that the patient had had a hard chancre a short time previously, the remains of which were still evident. Under antisyphilitic treatment the induration of the cicatrix on the arm began to disappear, and after some weeks the cicatrix resumed its normal appearance.

In the absence of evidence of recently acquired syphilis, I should have been compelled to diagnose the foregoing case as one of ordinary morphœa following an injury and developing in the cicatrix.

I am, Sir, yours obediently,

Nottingham, May 25th, 1885. H. HANDFORD, M.D.

MAHOMED MEMORIAL FUND.

DR. AUSTIN FLINT of New York has forwarded to us the sum of £1 in aid of the above fund.

Dr. Ferris of Uxbridge is thanked for his letter and enclosure. Our remarks, as he perceived, were written on the ground that the period of incubation in his case was unusually long even for hydrophobia.

W. M. has not enclosed his card.

Dr. J. A. Gray (Atlanta).—We cannot extend our exchange list.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Chaplin, Jerusalem; Dr. E. Crookshank, Dresden; Dr. Russell Reynolds, London; Dr. Cobbold, London; Dr. Ewart, London; Mr. Barwell, London; Dr. Collingridge, London; Mr. Jackman, Coggeshall; Dr. Handford, Nottingham; Dr. Prosser James, London; Dr. Oliver, Harrogate; Mr. De Méric, London; Mr. Twyford, Hanley; Mr. Field, London; Mr. Turner, St. Petersburg; Dr. Thin, London; Mr. C. J. Stocker, Forest Gate; Mr. Chavasse, Birmingham; Mr. St. John Wright, London; Mdlle. V. de Bunsen; Mr. W. Steer; Dr. Savage, London; Mr. B. Pollard, London; Dr. Brailey, London; Mr. Percy Dunn, *London*; *Mr. P. J. Thompson, Brussels*; *Mr. Somers* Vine, London; Mr. W. P. Fox, Liverpool; Mr. B. Squire, London; Dr. J. Tily, Chiswick; Dr. Colquhoun, Dunedin; Dr. H. E. Armstrong, Newcastle-on-Tyne; Mr. P. W. Macdonald, Dorset; Mr. A. C. Munro, South Shields; Dr. Ormsby, Dublin; Mr. C. S. Jeaffreson, Newcastle-on-Tyne; Dr. J. D. Thomas, London; Dr. Irwin; Mr. Brocklehurst, Matlock; Mr. Furland; Mr. Fairman, Bruntsfield; Mr. Prodham, London; Dr. Diver, Keighley; Mr. Green, Derby; Mr. Lonergan, Hythe; Lieut.-Gen. Radcliffe, Leamington; Messrs. Oliver and Co., Manchester; *Mrs. Goff, Birkenhead*; *Messrs. Calvert* and Co., Manchester; Mr. Gordon, Devonport; Mr. Evans, Oswestry; Mr. Ulbrich, Pulina; Messrs. Oliver and Boyd, Edinburgh; Mr. Lowndes, Newcastle-on-Tyne; Mrs. Martin, Middlesbrough; Messrs. Griffin and Co., London; Messrs. Lee and Martin, Birmingham; Dr. Gledhill, Manchester; Mr. Davies, Bath; Mr. Gallahier; Messrs. Douglas and Mason, Edinburgh; Dr. Hallkin, Inverness; Messrs. Reynolds and Branson, Leeds; Dr. Squire, London; Mr. Anderson, Llandudno; Dr. Mackew, Paris; Mechanic; L.R.C.P.; Oil Immersion; Volunteer Surgeon-Major; *G. B. P.*; W. M.; *D. M. P.*; *B.*; J. A. T., Hampstead.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Kerr, London; Mr. Allen, New Brighton; Dr. Maskew, Romsey; Mr. Wood, Chelsea; Mrs. Woodcock, Ryde; Miss Rimmer, Wigan; Mr. Mason, *Highbury*; *Mrs. Brown*, Walthamstow; Mr. Wright; Dr. Eberle, Thirsk; Mrs. Griffith, London; Mr. Denne, Halesowen; Mr. Soper, Dartmouth; Mr. Gallagher, Bishop Auckland; Dr. Robertson, Sheffield; Mr. Ferguson, Cheltenham; Dr. Brockhurst; Mr. Jennings, Port Harlington; Messrs. Maguire and Son, Dublin; Mr. Birchall, Liverpool; Mr. Fidler; Mr. Parry; Mr. Myers, *Great Grimsby*; Mr. Lawson, London; Miss Rogerson, Newton-le-Willows; Mrs. James, St. John's Wood; Mr. Sutton; Mr. Rahn, Ipswich; Messrs. Austin and Sons, Clifton; Messrs. Mackay and Co., Edinburgh; Mr. Mayo, Great Yarmouth; Messrs. Porteus and Co., Glasgow; Messrs. Byles and Son, Bradford; Albus, Leicester; Theta; Stratton, Birmingham; H. S. R.; L.R.C.P.E.; Matron, St. Helens; F. C., Halifax; M.D., London; G.W.R.; F.R.C.S., Edinburgh; F.S.A., Wye; G. B.; M.D., Draycott; Undergrad., Arbroath; Secretary; Physician, Southwark; Medicus, Wiston; E. D. C., Wednesbury; J. R.; A. B., Whitechapel; Delta, Christchurch; R., St. Helens; Physician; A. B. C., Notting-hill; J. G.; House, Brighton; A. H., Brixton; A. P.; C.

New York City Record, Newcastle Daily Chronicle, Edinburgh Evening Express, Church of England Temperance Chronicle, Auckland Chronicle, Elgin Courant, Florida Times-Union, Gloucestershire Chronicle, North Devon Journal, Darlington and Stockton Times, Liverpool Evening Express, Croydon Advertiser, Croydon Chronicle, The Crofter, &c., received.

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Address

TO THE

STUDENTS OF THE MEDICAL SCHOOL AND UNIVERSITY COLLEGE, BRISTOL.

Delivered after the Distribution of Prizes, on May 18th, 1885,

BY J. RUSSELL REYNOLDS, M.D., F.R.S.

PROFESSORS OF THE FACULTY OF MEDICINE, LADIES, AND GENTLEMEN,—First of all, let me express, for you and for myself, our heartiest congratulations—and that means "rejoicing with those who do rejoice"—to those who have been successful to-day. This not only because of the prizes that they have gained—although these are good things in themselves, and to be highly prized both now and hereafter,—but because they are marks of good "training" and tests of "strength." There are three things that success in college competitions, or I might say more generally that college competitions put to the test, which it is well to have tried, and that in good time, for they will furnish much guidance for after-life. They may be put thus: (1) *strength* both of body and mind, and upon that depends much of what people regard as "temper"; (2) the *method* of study; and (3) the *capacity* for reproducing, when wanted, the knowledge and the skill that you have acquired. There are two classes of men, especially marked from one another, who compete for prizes; and, as an old examiner in university and in college, you will let me tell you that they are generally quite easily distinguished from each other, and this in both their "written papers" and in their *vivâ-voce* answers to the questions that may be submitted to them. There are great and numerous varieties in the style of answer, but no practised examiner can fail to recognise the difference between the two classes of men that I have mentioned. In the one, the man has been working for the pass or the honour that he wanted to obtain; in the other, the man has been working to gain the knowledge which makes that pass or that honour well deserved. Men of either class may obtain their reward; but the reward of the one is of far higher value to himself and to others than is that of the second, which may sound the same; but yet be something that neither he, nor others, will care for, when a few months have passed. Before I say a few words of congratulation to the unsuccessful, or rather, *to those* who have run, but "have not obtained the prize," let me, as a much-tried examinee, as well as examiner, take this occasion to remind you, both prize-takers and prize-losers, that the element of chance is not without its influence in either pass or honours' examination. It is as easy to exaggerate as it is to underrate this factor; but it should always be borne in mind. Let no failure be referred to it alone; let no success lead you to ignore it.

How it may be in this school of medicine I do not know, but in many schools, both metropolitan and provincial, those who enter upon "competitive" examination are in a small minority; and of this I am *quite sure*, that the majority, composed of those who never try their strength until they face a court of examiners for a simple pass, deprive themselves of one great and highly important element in their education. If all students practised themselves in the art of expressing themselves well in both written and oral examination, a very much smaller number would, when they come before the examining boards, be "referred again to their studies." No man, until he has tried it, knows usefully how to write the answer to a question without note or reference-book at hand, or to answer swiftly and to the point, *vivâ voce*, a question suddenly put to him, and the character of which he did not in the least expect. To those of you who have not been so successful to-day as you could wish to have been, let me say this, that most likely you have gained for yourselves something better than a "prize." You have learned why you have failed, and such knowledge is of vast importance. You—for men at the same school are very sharp critics and judges of one another—know why others have succeeded and why you have not.

Think back for a moment upon the three elements in successful competition—those I mentioned a few moments since: (*a*) *strength* and tone of feeling with regard to study. Some are what may be called "languid." They do not use all the power they have, sometimes only a small fraction of it, which they may deem quite sufficient for the occasion. This may be from either flaccidity of moral fibre or from overweening self-confidence. On the other hand, there are some who are over-anxious, and their work is done under a dominating feeling of the fear of failure; and their feeling is often the unwilling father to the fact. This often leads to (*b*) an error in the *method* of study, and the greatest of all errors is this: to make the passing of an examination the object of your work, and to substitute it for the "mastery of the matter" you want and ought to obtain. Work done in this frame of mind is invariably and in the main bad work. If it should end in some success, it may lead to "vanity;" if it fails, it carries with it only "vexation of spirit." Again, in referring to (*c*) the *capacity* for reproducing, when wanted, the knowledge that you have already acquired, let me remind you of the presence of two great factors in that which constitutes what is habitually termed "a good memory." There is (1) the *storage* of information and (2) the faculty of *finding* what you have stored. Individuals differ widely in the degree to which they are naturally endowed with these faculties, but each may be increased by education. The first depends mainly upon your power of "attention," the second upon the "orderly" manner in which you arrange the materials in your possession. If you try to add *to your stores when* your power of "attention" is weakened, you will send one thing out of your head while you are putting another in, and your brain, like an overcharged popgun, will sometimes lose both shots. By no amount of clever manipulation can you put *anything more into any created* thing than its capacity can hold. If you pack your carpet-bag to the full, and then jam in something else, the probability is that you cannot lock the bag: you have hurt it or torn it somewhere, and have lost something that you much wished to keep, and probably much more valuable than the last trifle of your "cram."

Then think, *again, of* what *it is to* pack carefully—i.e., with attention, arranging with foreknowledge of your requirements what you will want first, second, and last, and contrast this with the unordered heaping of things together in a limited space, the impossibility of catching what you want, and the certainty of finally finding that you have, metaphysically, to turn yourself "inside out," and, like a startled parrot, to pour out in unmeaning succession all you know and all that you can say. So, then, if you would have a "good memory," pay attention and be orderly. Practically cultivate these two capacities, and so by concentrating your attention on a sound (it may be stethoscopic), on a something to see (it may be microscopic); but do this with both ears and both eyes open: follow through a symphony in the full rush of sound, a single strain or a single instrument, while hearing all the rest; see all that you can see in a landscape, but single out something that you must look for to see at all, and so raise to its highest degree your attentive power.

And so with "recollection." Put all things in order, and then close your eyes and ears, and recall all that you have stored, where it is, what it is, why you placed it in this or that other place, and how you may most easily find it—and that will be very often in the dark.

Speaking to all, I would say, generally, that if we have regard to the three points laid down, pay due regard to the element of "chance," and then add that "unknown quantity," the x, y, z, of College life, successful and unsuccessful will find that unknown quantity to be very small, and will be able to explain to one another—as they should always be most glad to do why the race has not more frequently ended in a "dead heat." A single success or failure, be it ever so great, may be the result of the merest chance, but progressive success or failure, year after year, takes them altogether out of the chapter of accidents, and should be the careful study of all. Regard prizes as milestones not as goals. They may tell you how far you have travelled, how far many are before you, and how far many are behind, and then explain to yourself by careful thought and inquiry why you are where you are. The prize tells you how much you have already attained; but if it does not tell you also how much more you have to do, it has taught you little.

Before I leave this subject, let me say to you in Bristol what I have often said to my pupils in London, that, so far as my knowledge extends, there is nothing laid down by our great examining bodies which any ordinary student, without either genius or fag, could not pass through with perfect ease if, and it is an important "if," he will only go on steadily and systematically at his work. The strain for "honours" has often broken men down, and they have to rest and lose their time, and not rarely miss the "pass" that they might have readily obtained. Most thoroughly do I admit the differences in degree of capacity for "honour"-taking among "all sorts and conditions of men." No one can doubt the existence of a "genius" any more than he can that of an utter "fool"; but I think that if *in medio tutissimus ibis*, you will find the majority by your side. So let me add a word to some who work too hard—i.e., try to do more than they need to do, and, moreover, trouble themselves about it a thousand times more than they ought to do; and I allude to many scores who have broken down in the very faculties they most sorely needed, and to whom I have had to say, "you must go away and rest," remembering, then, as Shakespeare says,—

> "As surfeit is the father to much fast,
> So every scope in the immoderate use
> Tends to restraint."

And now let me tell you that when you have finished here, and have satisfied college, university, and hall, your real examination begins, and it is one that will last for life. Your examiners will be your patients, and your patients' friends, and you will find them not more lenient than those you have already passed. But the same qualities which have helped you now, and until now, will be your helps hereafter in the daily toil of practice. First, you must hold in due regard your strength and temper. "Never," as Edmund Parkes said, "think of your life, but always of your health, which alone can make life useful." You will find much to try, disappoint, and vex you; but you must be firm and of good courage, and you must show your patience when men, like drowning men clutching at straws in their hour of agony, will when safely on the bank, through your energy and skill, give you nothing but a cold shoulder, or grumble at your fee. There is, always remember, another side to this. To many you will be friends for life. There will be homes which will become homes to you, and no event, from the cradle to the grave, will be left unchronicled in their hearts and yours. This, second, will depend mainly upon yourselves and how your way of work has helped or depressed them. You cannot solve the problems of the sick-room in one quarter of your cases by stethoscope, thermometer, or any such like means. It is by knowledge and sympathy that the help is given. Like good actors, you must so throw yourselves into the mental and moral condition of those with whom you have to deal that you think their thoughts and feel their feelings, and so understand their wants and try to fill them. Again, third, your knowledge and your skill must be always ready, not lying in dust-covered books upon your shelves, but always at your fingers' ends.

Success will mainly depend upon yourselves. If it is true that the poet is born, not made, that dogma is quite as true with regard to the physician. You must be men that your patients and their friends can trust, and do so without knowing it. You must be calm, without indifference; judgmatic, without dogmatism; clear and ready, without rashness; kind, but with both tenderness and firmness. You must always avoid that tenour of mind which I take leave to call "a chronic chorea of ideas." You must go at once and straightly to what you want to say and do, and not let your fancies, your hobbies, and scarcely remembered knowledge come in your way and misdirect the movement that you mean to make, or else you will find that "enterprises of great pith and moment" will often "turn awry, and lose the name of action." And here let me caution you against reading much or contributing anything to the ephemeral literature of the day. Hasty generalisation is as easy as it is bad; and many things are being constantly brought forward in societies and pamphlets as great and surprising novelties which you may find well described in such classic works as Watson's Lectures, the monographs of Williams, of Louis, of Walshe, of Frerichs, of Abercrombie, Rayer, and Andral.

Before you enter your profession you should "count the cost." There is no great prize in it. Nothing that approximates the "prizes" to be gained in either the Church, the Bar the Army, or the Navy. There are no great "honours" that you can gain. You may receive the kind and degree of reward that is given to the conveyer of a "despatch," or to a worthy country mayor who has long voted consistently with his party; but you may not look with hopeful eyes for anything beyond. You may die on the battlefield, or be heavily shotted as you sink into the ocean in the darkness; you may be maimed or killed by a lunatic; or be fever-struck in a workhouse, an asylum, or a gaol, where you are doing work that the country has given you to do. There may, perchance, be two or three lines about you in a local paper, the medical press of London may give a short history of your life. You may leave behind you broken hearts in more than your own one sad home; but that is all. There is no adequate recognition of the services of our noble Profession granted by either State or country; but there is one thing to which, when your work here is done, every one of you may attain, and this without rivalry of any sort or to any degree. You may, in the solemn silence of your own heart, in that court of appeal into which none but God Himself can enter, after giving thanks for all the goodness you have received from Him, say your "Nunc Dimittis"; and although you may not hear the sob or the unspoken word, yet you will be followed by the unuttered prayer that all bereaved and sorrowing souls know so well, "Requiescat in pace." But I will not close in this somewhat sombre strain, although it has its bright as well as its darker tones. One of our greatest poets has said,—

> "The clouds that gather round the setting sun
> Do take a sober colouring, from an eye
> That hath kept watch o'er man's mortality."

But yet, although "the night be dark and dreary," and there may be many "starless nights and cheerless dawns," we must remember that the same great poet said, in another place, when glowing with the enthusiasm of growing life,

> "But for the growing youth
> What soul was his, when, from the naked top
> Of some bold headland, he beheld the sun
> Rise up, and bathe the world in light? He looked"—

And so let us, from our point gained to day. Look at what may be in store for some of you, or for some who follow you. What that may be I cannot tell; but yet we may, and we should, indulge the hope that, in that universal "light"—it may be far, far away in the future,—some one will live to see the future Edward Jenner, who may have saved, as his great predecessor had done, millions of lives from misery and death, placed somewhere in a niche of honour in our own country instead of in Boulogne, and not be relegated here, in England, from Trafalgar-square to an obscure corner at the far end of the Serpentine, where nursemaids are engaged in keeping erratic children from falling into its stagnant water.

Again, that the William Jenner of that far-off day, who may again have so disintegrated the sources of some of our most miserable maladies, and demonstrated, as his illustrious forefather had done, that by deeds of heroic scientific work, such as those now progressing, they are, in the main, "preventable diseases." Further, that the future Edmund Alexander Parkes, who shall have again lightened every soldier's knapsack, arranged his diet, ventilated field tent and hospital ward, and so saved thousands of the lives of England's bravest sons and soldiers; and, yet further, that the John Simon of "the coming race;" if there be, again, in one man combined such science, patience, thought, and self-sacrifice—one who shall, again, have protected our shores from enemies more deadly than any that our battalions or our ironclads can oppose;—then, I say, let us hope that it may be seen that, although these great men of the future may care as little as really great men have ever done for the honours that other and smaller men prize so highly, yet that our country may be the better for having placed them where they ought to be, with all the honour and glory that is their due, and which will, let us hope, be gladly awarded then by the heart, the larger heart, of this great and the greater nation.

> "Let us, then, be up and doing,
> With a heart for any fate,
> Still achieving, still pursuing,
> Learn to labour and to wait."

And not only so, but to work and wait in hope.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on May 27th, the degrees of Bachelor of Medicine and Bachelor of Surgery were conferred on Robert Lawford Knaggs, Gonville and Caius.

Clinical Remarks

ON A

SE ILLUSTRATING LIABILITY TO ERROR IN DIAGNOSIS,

H FREQUENT PAINFUL ATTACKS, PROBABLY OF Y COLIC (REPUTED AS GASTRIC), OCCURRED DURING THAN TWO YEARS IN CONNEXION WITH MITRAL DISEASE AND DILATED HEART, THE FATAL ISSUE DETERMINED BY A SMALL CALCULUS LODGED IN ODENAL ORIFICE OF THE COMMON DUCT. JAUNDICE BLY ABSENT THROUGHOUT.

BY W. T. GAIRDNER, M.D., LL.D.,
FESSOR OF MEDICINE IN THE UNIVERSITY OF GLASGOW.

MEN,—I have to-day (May 26th, 1885) to bring our notice a case interesting in more than one but particularly as illustrating an oversight or (if not error) in diagnosis. Errors in diagnosis, if not the result of mere carelessness (in which case , they have no redeeming quality except as a lesson individual), ought always to convey some kind of on to good clinical students, and therefore ought to insisted on, if possible, than instances of very exact ucky guesses at truth. In this particular case the omission affects one part of the diagnosis only, and ly fraught with instruction, and with what is, to ast, new and therefore valuable experience. This e I shall now endeavour to convey to you fresh sources, and you shall judge for yourselves of its ce and practical significance. The case, I may was repeatedly the subject of clinical remarks st winter session, and perhaps some of those here ay have these in their note-books.

end of December last[1] we admitted into the Infirmary a woman, Mrs. G——, aged forty-six, labouring under dilated and weak heart, with gurgitation, and just possibly also (but not cer- itral stenosis. There is nothing more to be said as rt of the case. The murmurs were so far charac- the one certain, the other all along doubtful. The ding conditions were found after death; the mitral ckened and fringed with lymph, certainly admitting itation, possibly—but by no means certainly—in a to give rise also at times to the direct murmur. s there is nothing new, and I shall not occupy your with it just now, though the details at the time resting enough, and the diagnosis here was exact at degree. Nor is there anything particularly novel ost of the sequelæ of the cardiac disease in this ere was dropsy, varying in degree at different ere was well-marked cyanosis, and a good deal of ; there was enlarged and congested liver; a con- dney also, yielding a urine mostly albuminous, and variable as to quantity and specific gravity; the mostly feeble, sometimes irregular and frequent, ery disproportionate in volume and force to the impulse of the dilated heart. With all these na in cardiac cases you must be quite familiar, and ve them not now under observation I merely thus e them. But what struck me in this case as even from the first, was the degree of what the hought, and we also thought, to be gastric suffer- report all through bears this upon the face of it: y first note of the case by myself, the day after , it is said: "The earliest symptoms, extend- to two years ago, seem to have been referred omach both by herself and her medical atten- want of appetite, occasional vomiting, and pain gastrium extending through to the back." Nine this she was first told that her heart was affected. one ought to say that painful disorders of the an very uncommon in heart disease, but the and severity of these apparently gastric sufferings in this case struck me as taking it quite out of the common range in this respect, and I believe I told you so at the time. This peculiarity, too, interfered with the administration of remedies; tincture of digitalis, at first prescribed, had to be stopped on account of sickness, though it acted with great energy upon the kidneys, and we were afterwards able to give Nativelle's granules of digitaline at least without injurious, and probably with good, results. A similar uncertainty seemed to attend the action of the convallaria majalis; it was in this case, therefore, beyond most others of last session, that I had occasion to thank Professor Fraser of Edinburgh for enabling me to employ a sample of the new cardiac tonic, strophanthus, which, after she became accustomed to the bitter taste of it, seemed to do everything that was expected from it, and not to excite the gastric irritation. But the numerous detailed reports show the great amount of difficulty we experienced in treating this case, owing to symptoms which, even when the cardiac and renal conditions were manifestly improving, were "referred more to the stomach than the heart" (February 7th—i.e., six weeks after admission). A week later we have again an allusion to the "ill-defined and gastric character of the symptoms" (then in abeyance). "She speaks of a sense of 'chuggin' (I make no attempt to render this word into scientific language—it must speak for itself) in the epigastrium, which she evidently attributes to the stomach and not to the heart." From this time improvement was, on the whole, progressive; but on February 27th there is a note, even in the midst of this improvement, that "for the past two days she has been troubled with intestinal colic" (here the word "intestinal," I must observe, is not mine, but embodies the theory of the resident physician); "but this symptom has been relieved by the use of assafœtida pills." She was dismissed on March 20th, 1885, after a residence of nearly three months, in a very greatly improved condition as regards the heart, and with the following highly satisfactory note as to the action of strophanthus, which I here place on record, in justice to a new, and probably a valuable, medicine. "Nothing like sickness has been experienced in the course of the treatment by strophanthus; patient only remarking that the medicine was very bitter."

Now, observe carefully all the preceding expressions taken from the hospital report; and further, note with me the sequel of this case, and then judge whether the whole or the greater part of the symptoms assumed to be gastric (or in one case "intestinal") are not rather to be referred to the biliary passages, as the result of the transit of a probably numerous succession of small gall-stones; since the post-mortem examination shows the terminal and severe epigastric sufferings to have been unquestionably so determined. But in order to enable you more fully to apprehend this, and to appreciate the difficulties of the diagnosis during life, I must add one more, *though it be a negative, fact*; which, however, you will please consider as not resting on direct evidence, and therefore just possibly open to correction—viz., that at no time while this case was under observation, possibly at no time at all during its progress, was there any notable jaundice. Had there been jaundice, and had it been brought into obvious relation with any of those numerous so-called gastric attacks, it would hardly have been possible to miss the true diagnosis; the pain, at least, must have been regarded as probably hepatic, not gastric, in origin, and the variable and colicky character of it at times, the sense of "chuggin," the severe suffering extending from front to back, would probably have brought up the idea of gall-stone, and caused concretions to be looked for in the evacuations. Nothing of this kind took place. But it is not only because we did not observe jaundice that I assume its probable absence. Jaundice from gall-stone, or from any kind of obstruction of the passages, is always accompanied by a very greatly deepened and altered colour of the urine, which it is hardly possible to suppose, with even moderate care, to have been wholly overlooked. Now, we have nearly forty detailed clinical examinations of the urine in this case recorded carefully in a separate book, as having been made between November and March; in every one of these nitric acid was employed, not, indeed, expressly to detect bile, but as a test for albumen; and in not one of these notes (in which, I may mention, the colour of the urine was particularly recorded in a column by itself) is there the slightest hint or suggestion of anything like bile pigment. "Amber" was the prevailing tint, lighter or darker according to circumstances. I affirm, then, with a probability almost amounting to certainty, that there was no jaundice; with absolute certainty, no persistent or considerable jaundice during the whole of this period. Moreover, the patient never mentioned jaundice as a feature of the early attacks, while she herself believed the whole disease to be altogether in the stomach; and jaundice (as you well know) is a symptom which, almost more than any other, arrests the eye and enchains the mind of a non-medical observer, so that it is popularly spoken of as if it were the disease whenever it is recognised as present at all; and I can positively affirm that in her last hours and in the dead body the conjunctivæ and *the skin were not jaundiced.* It would be too much, perhaps, to maintain on this negative evidence that this woman was never at any time jaundiced; but there is good reason to presume that during a large part of her illness, and during the most marked prevalence of the symptoms above recorded, bile pigment was very little, if at all, abnormally present in the blood. Hence the error or omission in the diagnosis to which I have referred.

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[1] Dec. 27th, 1884, Journal X., p. [illegible]

Mrs. G—— was admitted to the hospital again on May 18th, 1885, certainly much worse than when she was dismissed in March; but, according to my judgment, not worse than she had been at various periods during her former residence. Three days after her admission (May 21st) I made a most careful examination, keeping in view all the facts previously recorded, and found them *in statu quo*, with the qualifications just made; the cardiac action the same, the murmur the same; "the gastric symptoms formerly described still present, but by no means in an exaggerated form. Legs considerably swollen, and with a tendency to eczematous exudation on the surface, but not very tense. The temperatures absolutely normal. The urine, noted as 19 oz. on the day after admission, rose to 101 oz. on the 20th, and to 148 oz. on the 21st." Similar rapid variations in quantity[2] had been recorded during her former residence as occurring under remedies; this time the increase took place partly under digitalis, partly under convallaria with caffeine. She had been treated locally, on account of the abdominal or gastric suffering and supposed flatulence, with poultices and fomentations to the abdomen; also with turpentine and soap enemata and compound assafœtida pill. The pulse and respiration were both considerably accelerated on the 20th, the maxima being 45 and 128; but, as above indicated, there was absolutely no fever. In the course of the next afternoon (21st) "she complained of a good deal of pain regarded as mainly gastric, but the temperature showed no rise, being 98·8° in the morning and 98·6° in the evening. At 2 A.M. of the succeeding day (the 22nd) a rigor occurred, after which the temperature was noted as 102·4°, for the first time since admission within febrile limits. Dr. Rutherford, the resident physician, was sent for, and found that the rigor had passed away, but the pulse was small and uncountable. At 6.30 A.M. the temperature was 103·6°; the pain was very severe in the upper abdomen, and continued until followed by unconsciousness. At 8 A.M. she was completely unconscious, and at 9 A.M. she died.

If you ask me now what I expected to find at the post-mortem examination as the cause of the fatal crisis in this case, I must frankly confess at once that I cannot tell. I thought it indeed just possible that there might have been some perforation of a viscus—stomach or duodenum,—giving rise to peritonitis, or to inflammation perhaps limited more or less by adhesions. Looking to the long-continued history of gastric suffering, this appeared not an unreasonable expectation, and one of the few causes that would help to explain a death within seven hours from the first rigor and rise of temperature. Beyond this I felt unable to carry speculation as to the precise cause of death, and certainly, in the absence of jaundice, it did not occur to me to attribute the death or the fatal sufferings to gall-stone. Yet here we have a gall-stone caught, as it were, *in flagrante delicto*, actually imprisoned in the common duct at the time of death, and forty-four more of them remaining in the gall-bladder after death. But the very largest of these gall-stones appears, especially in the dilated state of the ducts, to be very inadequate to their complete closure. There is not one of them that measures even half an inch in its extreme diameter; and this one, closely resembling the impacted one in size, weighs only five grains. The smallest weighs only half a grain. All of them are facetted—that is, they have smooth, flat surfaces, separated by straight angular ridges. They must therefore have been at one time packed together pretty closely in the gall-bladder, yet not so closely but that some amount of friction took place, and the opposing surfaces were thus polished and rubbed quite smooth. But although the gall-bladder at death contained all these calculi, it was not even nearly full of them; it was, indeed, considerably dilated, and could easily have held many times the number found without stretching. Is it too much, then, to presume that there were, or may have been at one time or another, scores, or even hundreds,[3] of such gall-stones present, of which a great many were discharged *per vias naturales* into the duodenum, at the cost of much suffering, but without absolute danger to life?

But how did the one actually found in the common duct, being not larger probably than many of the others, and not visibly impacted so as to be inconsistent with its passing the orifice by means of a moderately sustained pressure, determine a fatal crisis? That I cannot tell, even now; all that can be said is that there was no other fact discovered at the post-mortem examination at all adequate to the production of these effects. The mucous membrane of the stomach and that of the duodenum were normal. The pancreas and the left supra-renal capsule presented "extreme hyperæmia." The liver was enlarged and congested (as we, in fact, knew that it must be a long time before death). The kidneys were enlarged and markedly hyperæmic. The heart was in the condition already referred to, and the aortic valve as well as *the mitral were slightly incompetent. That is all. It* would be more absolutely correct, perhaps, to say that this woman died *with* a gall-stone *in transitu*, than to say that she died simply *of* an impacted gall-stone. But the sufferings connected with the fatal event were unquestionably, *I think*, chiefly determined by the imprisoned, and as yet undelivered calculus, lying in the very outlet of the common duct. An hour or two more of suffering, a little more strength to bear it, less of congestive complications in the adjoining viscera, and she might have weathered this storm also, like the others before it. But the special instruction which the case conveys is to be found in the evidence it affords that so small a gall-stone, not completely closing the duct to the passage of bile, may nevertheless cause severe, and in this particular instance fatal, suffering; and further, that in all probability an unknown multitude of such calculi may pass in succession, all attended with similar sufferings (except as regards the presence of fever in the fatal crisis) without any jaundice being discoverable from first to last.

There are numerous cases recorded in medical literature, and preparations preserved in museums, illustrating the arrest of gall-stones *in transitu* from the gall-bladder to the duodenum, sometimes in the cystic, sometimes in the common duct. When the stone is a large one, and is therefore long retained in the cystic duct, there is of course during this period no jaundice. Dr. Murchison[4] records a case (cxvii. p. 368) in which "*the patient suffered from severe biliary colic daily for four months before jaundice appeared*, the stone, from its great size, being all this time detained in the cystic duct; and Trousseau[5] mentions a case *in which biliary colic occurred repeatedly during four years, and then for the first time jaundice occurred." In this case* Trousseau assumes that the calculus remained in the gall-bladder, occasionally getting into the cystic duct, with the result of producing the attacks of pain, and returning again to its original position. "In the fifth year," he adds, "the attacks became more severe, jaundice appeared, and the disease ceased upon the expulsion of a single calculus, shaped like an olive, the greatest diameter of which was two centimetres." In Murchison's very interesting case above mentioned there were grave doubts entertained as to the diagnosis, although thirteen years previously regular attacks of biliary colic, followed by jaundice, appear to have existed. Cancerous disease is apt to be suspected in such cases, and was so in this case by some. But the post-mortem examination showed that a large gall-stone, probably long impacted in the cystic duct, had made its way latterly into the common duct, and was there retained, and had been ulcerating through the mucous membrane of the duodenum, so as to cause hæmorrhage and other unusual symptoms, among which was, for a time, "almost constant diarrhœa."

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[2] Trousseau, in his admirably instructive and interesting lecture on Hepatic Colic and Biliary Calculus (Sydenham Society's Translation, vol. iv., pp. 227, 234), writes as follows on the quantity and physical characters of the urine:—"The icteric tint seldom appears till the day after the attack. . . . . Even during the attack, the urine, which is very copious, is limpid like water from the rock, being, in fact, what is called *nervous* urine. . . : . It is not till twelve, eighteen, or twenty-four hours later that it assumes [illegible] colour characteristic of jaundice; and [illegible] is not till then that it will appear." [illegible] ndice, &c.," 1870, entirely ignores this curious statement, which is also passed over by other considerable authorities. Dr. Legg is "inclined to put the first appearance of jaundice much earlier after obstruction; perhaps within the first twenty-four or forty-eight hours." Dr. Murchison recognises the *urina nervosa* not only as sometimes preceding, but as, under rare and exceptional circumstances, accompanying jaundice during brief periods. But in the case here recorded the excessive quantities of urine passed at times, and maintained for many days together, apparently under the influence of remedies, were never recognised as having any relation to the particular attacks of pain.

[3] Several cases have been recorded reaching one thousand or more. One such case is to be seen in the Hunterian *Museum in Glasgow* University.

[4] Clinical Lectures on Diseases of the Liver, &c., 2nd edition, 1877.

[5] Clinical Medicine (Sydenham Society's edition, 1871), vol. iv., p. 277.

But these cases, illustrating the long-continued absence of jaundice when the calculus is so large as to be detained in the cystic duct, can hardly be considered as throwing any light on the total absence of jaundice in our case, where the stones were so numerous and so small, and the biliary passages so much dilated throughout as to give them comparatively an easy and rapid course to the duodenum.[6] Assuming that the attacks of epigastric pain suffered at intervals for more than two years by our patient are to be regarded as similar in origin to the fatal attack, we can only suppose that the comparatively small size and facetted character of the individual gall-stones passed during this period incapacitated them from completely obstructing the duct, or that their very rapid passage gave no time for jaundice to take place in each separate attack. "If the stone finds its way into the bowels within twenty-four hours," says Murchison, following in the main Trousseau, "or if it does not get beyond the cystic duct, or if its form is so angular as not entirely to block the flow of bile, it is quite possible to have biliary colic without jaundice. ...... There is good authority for the statement that small biliary calculi have been found in the stools of individuals who have never had jaundice, but such cases are certainly exceptional; and I am unable to understand the statement of Wolff,[7] that twenty-five out of forty-five patients observed by him passed through the whole train of symptoms of biliary colic without jaundice, the concretions being found in the evacuations."[8]

In Von Schüppel's elaborate article[9] the following closely corresponding passage is found: "If the stone makes its way into the intestine after having been arrested in the common duct less than from twelve to twenty hours, or if it does not advance beyond the cystic duct, or if it is of angular form and the bile can flow alongside of it, no jaundice will occur, although hepatic colic is present. By bearing this in mind we shall understand those cases in which people suffer repeatedly from attacks of colic, which are regarded as gastric colic, because no jaundice ever appears, and in which the subsequent course of the disease leaves no doubt that the paroxysms of pain were really due to the presence of gall-stones. In such cases the diagnosis is sometimes confirmed by observing that the attack of pain is associated with a very slight yellow colouring of the conjunctivæ at least, or that the urine shows small quantities of biliary colouring matter."

These citations will serve to show that the case now brought before you is not, perhaps, altogether unexampled, although I confess that I had never before either seen or heard of one in which such a succession of attacks, extending over so long a time, and involving in all probability the passage of quite a multitude of gall-stones, had occurred without either yellowness of the skin and conjunctivæ, or the detection of bile pigment in excess in the urine. I have therefore thought it my duty as a clinical teacher to publish the case.

ADDISON'S DISEASE WITHOUT TUBERCULAR DEGENERATION OF THE SUPRARENAL CAPSULES.

BY J. WICKHAM LEGG, F.R.C.P. LOND.

IT would seem that the theory which makes tubercular disease of the suprarenal capsules an invariable accompaniment of the clinical symptoms of Addison's disease will have sooner or later to be abandoned. Eleven years ago there came under my notice the first of a series of cases in which undoubted Addison's disease has existed during life, and yet after death no tubercular disease of the suprarenal capsules has been found. A woman, thirty-seven years of age, about eighteen months before her death noticed a black line on her lips, and two months before this she had begun to be very weak, with shortness of breath; she was also subject to vomiting, which the patient herself called being bilious. On admission the face was noticed to be pigmented, while the sclerotics were a clear white; the buccal mucous membrane was also pigmented, the lips and the gums being marked with bluish-black lines, and the palate spotted with bluish spots. Further, on the arms were the little black pigmented spots which are considered so characteristic of Addison's disease. The legs, arms, and trunk were generally of a brownish colour, which was not more marked around the umbilicus or the mammæ. She died about a month after her admission into St. Bartholomew's Hospital, with symptoms of extreme weakness and vomiting.

The examination showed well-marked pigmentation of the knees, the inside of the thighs, the outer genitals, the abdomen, and the lips. Under the skin there was a fair amount of fat. There was no phthisis, and the only noteworthy appearances found in the body were connected with the suprarenal bodies. A very careful dissection failed to detect any right suprarenal body. First of all, the inferior cava was drawn down and the sympathetic nerves behind it dissected; no naked-eye appearances of disease could be made out; the place of the right suprarenal body was taken by a small lump of fat, not so big as a hazel nut, into which an artery from the junction of the right renal with the aorta could be traced. This little artery was about as thick as a common pin. On the left side there was found a black body in the place of the suprarenal capsule, and of its shape, but not of its thickness. It had vessels like those of the right capsule, but it was a mere shell; when cut into, one wall could at once be raised from the other, and there appeared to be nothing between them. This body under the microscope showed well-marked connective tissue fibres with numerous fat drops in the meshes, but no remains of the ordinary texture of the suprarenal body.

This case was noticed by Dr. Greenhow in the second Croonian lecture read before the College of Physicians in 1875, but he did not admit that it was a case of Addison's disease. And on these grounds—First, that there was a "bilious tendency to explain the vomiting." Now, it is true that the patient did say that she was often bilious; but those who have had much to do with hospital, or indeed other patients, will know that with them an onset of vomiting is usually called being "bilious." Though I thought it right to record the patient's own words, yet one is not bound thereby to an approval of what is said or of the theories of disease which are connoted in such expressions. Secondly, "the patient had lost four stone in weight during her illness." Now, these are again merely the patient's own words, and they possess only the usual worth of such statements. After death there was found a fair amount of fat under the skin. Last of all, it was objected that the temperature was above the normal. It was once 100°. I hardly think much stress can be laid upon a single observation, only 0·4 or 0·6 of a degree above what is natural. Besides, it will hardly be allowed that the temperature in Addison's disease is never raised. I have myself had under my care a very marked case of Addison's disease in a little girl of twelve, in whom the suprarenal capsules proved after death typical specimens of tubercular degeneration, and yet during her stay in the hospital the temperature was seldom down to 98·4°. This elevation of temperature seems to be now an admitted clinical fact, for I find in the last edition of Dr. Bristowe's "Theory and Practice of Medicine"[1] that the temperature sometimes "rises one, two, or three degrees." So that a temperature of 99° can hardly be considered a point sufficient altogether to exclude the diagnosis of Addison's disease; and this rise of temperature seems to be as little worthy of consideration as the thirst, swollen gums, and red, fissured tongue also pointed out as inimical to the diagnosis. On the other hand, the symptoms declared in the Croonian lectures to be so important were very marked—to wit, the shortness of breath, the weakness, the vomiting, and pigmentation of the skin and mucous membrane. With this last there was an appearance, "one of the most decisive external signs of Addison's disease," the small black patches of pigment on the skin of the arms.

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[6] In this fact, too, is probably to be found the reason why the pain, though often no doubt considerable, never assumed under observation the exquisitely agonising character attributed to that of gall-stone; nor had it, I think, the extremely sudden invasion usually observed in the case of a large calculus, or even of a smaller calculus passing for the first time through the bile-duct.

[7] Virchow's Archiv, vol. xx., 1861: Beiträge zur Symptomatologie und Diagnostik der Gallensteine; von W. Carl Wolff, Pract. Arzte in Bonn. After a careful perusal of this interesting and valuable paper, I am disposed to attach more importance to its conclusions in this respect than Dr. Murchison appears to have done. But, as Dr. Wolff gives no details of his cases, it can only be here stated in general terms that they were mostly uncomplicated—i.e., without organic disease or serious illness of any kind, apart from the symptoms specially described. As only such cases are included as were actually found to have passed gall-stones with the evacuations, it is plain that a more or less considerable number of doubtful cases must have been eliminated. On the other hand, this fact gives to the study of the symptoms of the cases referred to an unusual measure of importance. Among these symptoms, next to pain and jaundice, the author has been led to give the first place to a slowing of the pulse, which takes place usually to the extent of from five to ten beats, and sometimes more, in the minute during the urgency of each paroxysm. This he observed in one case in which the attacks recurred almost daily, and were watched for many months, with all precautions against fallacy. In uncomplicated cases, whether with or [illegible] he found this symptom so constant that in doubtful [illegible] the leading element in the diagnosis.

[8] [illegible]

[9] [illegible]

While recording this case in 1874, in the St. Bartholomew's Hospital Reports for that year, I ventured to remark that if the facts were good, as there seemed no reason for doubting, some of the then prevailing theories as to the nature of Addison's disease would have to be greatly modified, or even altogether abandoned. And the progress of events has been somewhat in favour of what was then foretold. On the 7th February, 1882, two cases of atrophy of the suprarenal capsules with Addison's disease were laid before the Pathological Society by Dr. Goodhart (for Mr. George Eastes) and by Dr. Henry Davy; and more lately, on February 3rd last, several other cases were brought forward by such excellent observers as Dr. Coupland and Dr. Thomas Barlow, and Dr. Coupland gives an account of all the cases of atrophy of the suprarenal capsules and of Addison's disease, which have yet been published.

There is thus a considerable and increasing number of cases of Addison's disease in which all the symptoms of this malady have been present during life, but in which after death the tubercular degeneration of the capsules has been absent, and only a wasted and atrophied state of these organs has been discovered. These cases are quite different from those which were formerly brought forward as Addison's disease without tubercular degeneration—cases which were so imperfectly described or so imperfectly examined that the account of many of them need only be looked at to convince the reader of its worthlessness to prove anything. Cases in which only the kidneys have been examined, or cases in which disease of the suprarenal capsule has been found without any symptoms of Addison's disease during life, or cases in which no description is given of the disease found in the suprarenal body, may all be put aside at once. It may be that the ease with which such cases have been hitherto answered has led some of the defenders of the tubercular nature of Addison's disease to fancy that the more modern instances may be as lightly passed over. But these later cases are far more difficult to overthrow. They have been seen for the most part in the practice of experienced hospital physicians familiar with Addison's disease, and the examinations after death have been made by experienced morbid anatomists who were not likely to pass by any important and gross changes in other organs which could cause death. These can hardly be set aside by any amount of special pleading; such carefully worked-out cases would be almost enough in themselves to destroy any theory of disease to which they are opposed.

It may interest some to hear of another case in which the same set of appearances was noticed. My colleague, Dr. Church, drew my attention to the patient soon after her admission as a well-marked case of Addison's disease; yet, after death, hardly any suprarenal capsule on the right side, and only a wasted remnant of the organ on the left, could be discovered by Dr. Norman Moore.

A woman, aged twenty-nine, was quite well up to December, 1883, when she began to be short of breath, to be giddy, and to vomit. A month later the discolouration of skin began. On admission into St. Bartholomew's Hospital, in May, 1884, her skin generally was pigmented of a tawny-brown colour; two deeper patches of pigment were seen over the right eye and the xiphoid cartilage; the axillæ were deeply pigmented, but there was no excess of pigment over the breasts. The lips were slightly pigmented. The whole body was rather wasted, weight 6 st. 1 lb. There were no physical signs in the lungs, but there was a short harsh systolic murmur at the apex of the heart, which was not audible at the base. The glands under the jaw were considerably enlarged, especially on the left side. The urine contained no albumen or sugar. She continued to grow much weaker, and had many attacks of vomiting. On May 27th, coinciding with an attack of fever, it was noted that the colour had become much darker. She died on June 11th. This patient had paroxysms of fever. From May 16th to 18th the temperature was above natural, reaching on the evening of the 16th to 101·8°. It was also above natural from May 24th to May 31st, the highest point being 102·6°; and again four days before death, the highest point being 102·8°.

The examination was made by Dr. Norman Moore, about thirty-three hours after death. The body was found wasted, and there was much dark-brown pigment in the skin. This appearance was more marked on the abdomen than on the chest, and was very distinct around the nipples. The whole of the back was much pigmented. Nothing unnatural was discovered in the spinal cord, brain, or ears. The lungs were quite natural; the heart was small, the muscular tissue brownish, the valves natural; weight, 6¾ oz. The contents of the abdomen were natural, with the following exceptions: there were three large gall-stones with facets in the gall-bladder, but the ducts were quite free, and the right suprarenal capsule was represented by a small shred of tissue, quadrangular in shape, about half an inch long by a quarter broad. The left was black, of natural outline, but completely wasted, and as thin as paper. The solar plexus to the naked eye was quite natural.

If, then, as seems likely, we shall be forced to give up the theory of the necessity of tubercular degeneration of the suprarenal capsules to Addison's disease, have we any other theory to put in its place? I think at the present moment we must answer "No;" and in the very great obscurity in which the subject lies it will be rather an advantage if we abstain from generalisations and inductions for awhile, and devote ourselves to the more elementary processes of the gathering and sifting of facts. After all, this latter occupation is really harder than the weaving and spinning of theories, and it was not without some justice that Cullen could say in the introduction to his "First Lines" that "there are more false facts than false opinions in physic."

Green-street, W.

ON CERTAIN CASES OF

DISEASE OF THE CENTRAL NERVOUS SYSTEM IN WHICH NO NAKED-EYE CHANGES ARE FOUND AT THE POST-MORTEM EXAMINATION.

By SEYMOUR J. SHARKEY, M.B., F.R.C.P.,
ASSISTANT-PHYSICIAN AND JOINT LECTURER ON PATHOLOGY AT ST. THOMAS'S HOSPITAL.

F. B——, aged six years, was admitted into St. Thomas's Hospital under the care of Dr. Payne on August 26th, and died on August 31st, 1882. The boy was an only child, and his mother was suffering from rheumatism at the time of his birth. His family and personal history was otherwise unimportant. He had never been ill in any way until six weeks before admission to the hospital, when he had a fall and bruised his forehead. His nose bled profusely at the time and at intervals for some days afterwards. The accident appeared, however, to have no effect upon his health. About a week later he was bitten by a dog on the left arm; the wound was cauterised although the animal was not mad. He was said to have been irritable and fretful after this, but otherwise well, and nothing of any importance was noticed until a week before he came to the hospital, when his legs gave way under him, his manner was somewhat foolish, his speech became affected, and he lost control over his evacuations.

On admission he was found to be a well-nourished boy, totally unable to stand or walk, or even to remain sitting upright when placed in that position, although he moved his legs in bed. He had considerable loss of power in his hands and arms, and although able to move them he could only do so in a clumsy, fumbling manner, which was especially evident when he tried to feed himself. There was no loss of sensation and no tenderness or swelling along the spine. The pupils were equal and acted well to light and to accommodation. There were no tremors. The patellar and plantar reflexes were absent, the cremasteric normal. No ankle clonus. The tongue was protruded straight and was covered with a white fur. The evacuations were occasionally passed in bed. The heart and lungs were normal. Urine 1030, acid, lithates deposited, no albumen. Temperature 98·8° F. The mind was clear, but the boy was somewhat dull.

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[1] Fifth edition, 1884, p. 677.

August 29th.—Patient very restless, and vomiting frequently; deglutition appeared to be difficult, and was followed by gurgling in the throat. He complained of pain in the right knee and of feeling as if a string was tied round his right thigh. Opthalmoscopic examination showed some haze round the discs, but no swelling nor any tortuous vessels.—30th: Patient easier; less restless.—31st: Irritable and fretful; cried when touched, and refused food. Swallowing seemed to be difficult, and the boy was unable to expectorate the mucus which collected in the respiratory passages. He died the same day. The temperature while the patient was in hospital never exceeded 99·2° F. A careful post-mortem examination revealed nothing which could account for death. All the organs appeared perfectly healthy, nor was there the slightest trace of disease of the central nervous system.

While I held the post of resident assistant-physician at St. Thomas's Hospital I had the opportunity of observing all the medical cases which were admitted into that institution for more than three years. I was then struck with the comparatively large number of persons who died with symptoms pointing to disease of the central nervous system, in whom the post-mortem examination disclosed no naked-eye phenomena sufficient to account for the fatal result. I was not then pathologist, and my time was too occupied to allow me to undertake what seemed likely to prove a lengthened investigation. Later, however, the opportunity was afforded me by the case related in this paper of endeavouring to unravel what, to me at any rate, was a mystery. I had followed the case clinically and seen that the prominent symptoms were those of motor paralysis of a very generalised character. I determined to harden and examine microscopically the principal regions of the brain and spinal cord, disease of which usually gives rise to motor troubles. The parts examined were: (1) The lumbar; (2) the dorsal; (3) the cervical regions of the spinal cord; (4) the medulla oblongata; (5) the corpus striatum with the external and internal capsules; (6) the parietal convolutions. The result was as follows:—

1. *Lumbar region of cord.*—The only thing which could be considered pathological in this region was the presence of a slight excess of nuclei.

2. *Dorsal region.*—Here there was some vascular distension, and a slight over-abundance of nuclei.

3. *Cervical region.*—In this region there were again found too many nuclei both in the grey and white matter, and an excess of leucocytes in some of the vessels. The nerve cells in this as in the other regions of the cord were healthy.

4. *Medulla oblongata.*—The changes here were similar to those in the various regions of the cord below, and must be looked upon as unlikely to have given rise to serious results.

5. *Parietal convolutions.*—Vessels were somewhat distended, and there was a general increase of nuclei. Here and there accumulations of leucocytes were seen in the interior of vessels and in their coats; but they were neither frequent nor striking in point of size.

6. *Corpus striatum and internal and external capsules.*—It was on this portion of the central nervous system that the brunt of the disease had fallen, and it presented very marked evidences of inflammation. These were:—(*a*) Distension of vessels and of the perivascular spaces. (*b*) The field of the microscope presented a network of small vessels filled with leucocytes, the white matter of the external and internal capsules being the regions most strikingly altered; and where the external capsule lies upon the corpus striatum a deep border of leucocytes was seen. (*c*) All through the tissues composing the basal ganglia a large number of white corpuscles were observed aggregated in the spaces round the nerve cells and elsewhere.

The results of the microscopic examination of the central nervous system show that the patient died of an acute inflammation, affecting most markedly the basal ganglia, but distributed to a certain extent over a much wider area. A pretty general motor paralysis or paresis was the most prominent symptom in the case, and the position of the principal lesion would well account for this. For in the internal capsule run not only the afferent, but also the efferent strands connecting the convolutions with the whole body. Why a lesion sufficient to impede motor impulses should leave the sensory ones free to pass is not known; but it is a matter of frequent observation that disease of the central nervous system gives rise less easily to anæsthesia than to paralysis, and that the former is more likely to prove a transitory phenomenon than the latter.

Generalisations should not be made from single cases, but nevertheless it is often useful to found hypotheses upon them; for facts subsequently ascertained can be more easily brought to bear upon definitely formulated propositions. Looking, then, at those cases which from the clinical point of view appear to be diseases of the central nervous system, but which yield so-called "negative" post-mortem results, and seeing that, although varying to a certain extent, they present many points of general similarity, the hypotheses I would frame are the following. That wide-spread inflammatory processes may affect the central nervous system, and even prove rapidly fatal, without producing any characteristic naked-eye changes; that in such cases particular portions of the cerebro-spinal system may be more intensely affected than others, and that differences in the clinical phenomena depend upon such localisations; that cases in which the brunt of the disease falls upon parts situated above the pons Varolii are not extremely rare, although they have not received much attention from clinical observers or from pathologists.

The state of opinion on the matter in question will be understood by a perusal of the following quotations:—Reynolds's System of Medicine, vol. ii., article on Cerebritis: "It is probable that general inflammation of the brain never exists alone, but that it is invariably associated with meningitis." "Of uncomplicated cerebritis we have no knowledge." In Quain's Dictionary of Medicine, Mr. Jonathan Hutchinson writes: "It may perhaps be doubted whether the occurrence of diffuse inflammation of the brain substance as an acute disease has as yet been proved, excepting as a result of wounds." "Such a condition of diffuse encephalitis may exist without there being any visible changes in the brain." Wilks' Diseases of the Nervous System: "A general cerebritis, although not so evident in a post-mortem examination, is probably not infrequent; it would be associated, in all probability, with an inflammation of the membranes, and therefore a meningo-cerebritis would be the more appropriate term." In Wilks and Moxon's Pathology, in speaking of diffused inflammation of the brain, the authors say: "This probably happens much more frequently than we recognise after death." In *Brain* for April, 1885, Bristowe writes: "Simple inflammation of the surface, or even of the substance, of the brain no doubt subsides, leaving little or no clinical trace of its pre-existence; and, probably, this is of more common occurrence than most of us suspect." The very interesting article from which these words are quoted is entitled "Cases of Recovery from Symptoms pointing to the Presence of Progressive Organic Cerebral Disease," and the bearing of the present paper on that subject is obvious. In Robert's Handbook of Medicine, sixth edition, p. 890, we read: "Cerebritis is *described* as diffuse or general, and local. The former does not imply that the whole brain is implicated, which is never the case, but merely that there is extensive inflammation of the superficial grey matter, this condition being only associated with meningitis, and evidenced by redness, softening, and adhesion to the pia mater when this is stripped off."

In my search for literature on this subject, I found a monograph by Dr. Charles Elam on "Cerebria and other Diseases of the Brain," published in 1872. Cerebria he defines as "acute, idiopathic, diffused inflammation of the entire brain substance, uncomplicated with meningitis." He calls it "a disease hitherto unrecognised and undescribed, the very existence of which has been formally denied, and one which presents many very remarkable and instructive phenomena." Dr. Elam quotes many authorities on diseases of the brain to show that cerebria is practically an unrecognised pathological condition. Among those cited are Sir Thomas Watson, Aitken, Abercrombie, Bastian, Russell Reynolds, Virchow, and Hayem. Speaking of the symptoms of cerebria, he says: "It is uniform in its commencement and its termination. It begins with vomiting and ends with death. The intermediate phenomena are not very striking, and the duration is from thirty-six hours to twelve days." "In cerebria none of those active symptoms present themselves. They only occur when meningitis is present. There is no coma properly so called. The faculties are oppressed and benumbed, but not entirely lost until the patient is almost in articulo."

It is quite clear from these extracts that Dr. Elam recognised that there were cases which presented a peculiar train of symptoms in which the autopsy revealed what he believed to be a simple cerebritis, uncomplicated with meningitis. And he was probably right in his conclusions, although microscopical evidence of inflammation is not given in most of his cases. In the case which I have described the prominent phenomena were motor paralyses, while marked mental disorder was absent. Such a condition corresponds with the comparative freedom of the convolutions from inflammation and the serious implication of the basal ganglia. In other cases in which nothing has been evident on naked-eye examination, delirium, coma, or other signs of derangement of the higher centres have been observed during life. And it is not improbable that such cases, if examined microscopically, might have shown a special localisation of the disease in the cerebral cortex. Some patients who have presented symptoms very like those observed in the fatal cases have recovered even when they appeared almost certain to succumb. If the pathological processes going on in their central nervous systems resembled those found in the case recorded in this paper, the favourable result is far from unintelligible. For the patient died from the effects of inflammation which, though intense, had produced no actual destruction of nerve tissue; and there seems no reason why the abnormal vascular phenomena should not under favourable circumstances recede and leave the brain as healthy as a lung is often left after an attack of acute pneumonia.

It must not be supposed that I pretend to explain all cases which present obscure clinical phenomena, apparently referable to brain disease, by supposing that the central nervous system is the seat of diffuse inflammatory changes, which the naked eye cannot appreciate. No doubt other causes, such as poisons circulating in the blood, or possibly mere molecular alterations in the nerve tissues, may produce similar clinical phenomena and fatal results without the intervention of inflammation. I merely ask the question, to which further observations must supply an answer in the affirmative or negative,—Do a considerable number of these cases depend upon simple inflammation of the substance of the brain, so-called cerebritis?

Portland-place, W.

RECOVERY OF GOOD SIGHT AFTER TWENTY YEARS' BLINDNESS.

BY GEORGE E. WALKER, F.R.C.S. ENG.,
SURGEON TO ST. PAUL'S EYE AND EAR HOSPITAL, AND TO THE SCHOOL FOR THE INDIGENT BLIND.

ACCUSTOMED as I have been, during some dozen years' practice of the operation, to the great benefits resulting from the severance of adhesions of the iris to the cornea, I confess that the case which I now relate has astonished me not a little.

L. N——, a girl aged nineteen years and three months, was admitted to the School for the Indigent Blind on the 22nd of April, 1884. Her right eye showed all the cornea, except a narrow rim round the margin, as one dense leucoma to which the iris was universally adherent. Of course this was hopeless. The left, in the central lower part, showed a dense leucoma, which shaded off rather abruptly into a fainter one just above, the whole leucoma having a diameter about half that of the cornea. The iris was adherent to the central part of the leucoma, except at the inner side, where a little of the pupillary edge had escaped, so that a very small pin-hole pupil was left; but as it was behind the leucoma and could only be seen sideways, it was not available for vision, and the girl said that she could see no better with the left than with the right eye, nor could she count fingers with either, but had only perception of light.

Thinking that I might give the left eye enough sight to enable her to move about without knocking against chairs and tables, I suggested to her and her father the propriety of treatment; but when they found out an operation was required, I received a prompt negative. At last the father consented that the girl should please herself, but it was not until November that she asked me to operate on her. On the 22nd I attacked the upper part of the adhesion in the way described in THE LANCET of Jan. 31st, p. 197, gaining a considerable increase of pupil. She suffered somewhat from the chloroform, and consented very reluctantly to the second operation, by which, on Dec. 10th, the severance of the upper limb was completed. On Jan. 6th I divided the lower limb at one sweep, although it was very broad; and on the 13th I cut the little bit remaining on the outer side. She was so averse to this last operation that I had to pretend an anger which I did not feel, and almost compel her to submit. One would have expected that the great benefit which accrued most markedly after each operation would have made her eager to submit, but the contrary was the case. Her first sensation after the admission of light into her eye was one of profound horror. She says now that when she first became conscious of sight, and therefore to some degree of space, her feeling was like that of one who looks over a precipice and fears that he will be impelled to throw himself down, and she at the time bitterly repented her consent to be taken out of the darkness which all her life thus far had enshrouded her. By this time, however, the leucoma had cleared up, especially in the upper part, and we found that she had a good-sized pupil, elongated from side to side, the upper, lower, and outer edge ragged from the cuts, whilst the inner presented the normal curve. I had hitherto thought it most probable that the lens had been destroyed, but now I found it existent and transparent, and on testing the eye (Jan. 28th) discovered that the long tension of the imprisoned iris had produced a myopia requiring a 15 D. glass for its correction. The wearing of this speedily caused a change in her state of mind, and she soon ceased to regret her loss of blindness. Under the affectionate tuition of a fellow patient she learned her letters in a day, and to read in a week. Of course this was all the easier from her ability to read with her fingers by Moon's types. Like as occurred in the little boy whose case is described in THE LANCET of Jan. 31st, 1885, a filament of uveal exudation joins the lower edge of the pupil to the cornea, and I shall divide this if I have reason to believe that it keeps up, in any material degree, the over-nutrition of the leucoma. This, however, now deprived of the large blood-supply given to it by the almost universal adherence of the iris, has cleared up greatly, the upper part being almost transparent, and her vision is now (March 2nd) $\frac{6}{40}$, and she reads pretty easily Jaeger 10, and with some little difficulty Jaeger 8—that is, print about the size of "leading article" type.

The main element of the surprise which I have experienced over this case is the retention of visual acuity by the retina under the twenty years' deprivation of light. I see so many examples to the contrary in the persons who present themselves at the Blind School—as, for example, in cases of neglected cataract, as well as in the more familiar instance of squint, which produces the amblyopia *ex inopsia* of the older writers,—that I was not prepared to find that in this girl the retina had preserved its sensitiveness so well; for all the want of acuteness now present may safely be debited to the opalescence of the cornea, which still remains. As this, however, is plainly decreasing, I trust that the eye may further improve. Another interesting fact is that the muscular tissue of the iris shows itself to be quite lively, as it responds promptly both to myotics and mydriatics.

I think now that I have said enough to show that this class of case—a more numerous class, probably, than that of cataract—is susceptible, even in the more formidable instances, of beneficial treatment, and that on the whole we may expect results at least as satisfactory as in other grave diseases of the eye.

Liverpool.

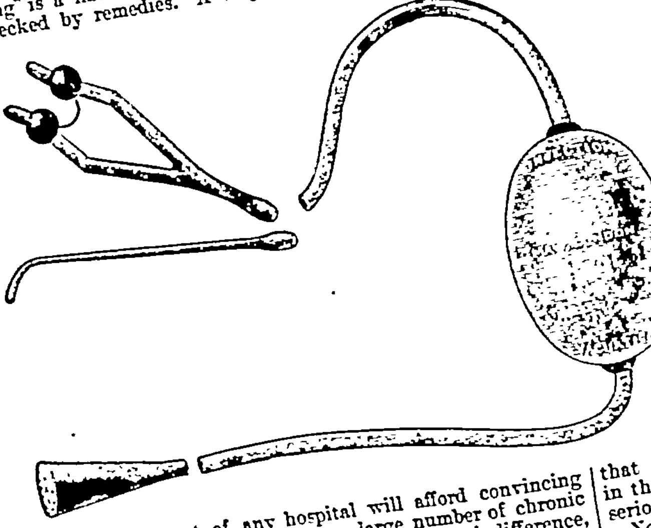
SOUTHPORT INFIRMARY.—The memorial stone of a children's ward to be annexed to this institution was laid on the 30th ult. The new building contains a ward which will accommodate nine cots, allowing each a cubical air space of about 1045 ft., and a "sun-bath," 24 ft. by 7 ft., with glazed sides and roof. The extension when completed will be opened free of debt.

NEW AURAL INFLATOR, EVACUATOR, AND INJECTOR.

WITH REMARKS ON THE TREATMENT OF COMMON AURAL DISEASES.

BY J. WARD COUSINS, M.D. LOND., F.R.C.S.,
SURGEON TO THE ROYAL PORTSMOUTH HOSPITAL AND TO THE PORTSMOUTH AND SOUTH HANTS EYE AND EAR INFIRMARY.

COMMON aural disorders are now receiving far more attention than at any former period, and the day is approaching when, by early diagnosis and treatment, their disastrous sequelæ will be greatly diminished both in number and severity. Scientific methods are taking the place of the old-fashioned and routine treatment by syringing and counter-irritation; still, notwithstanding the all-round improvement that has fortunately occurred, the risk of neglecting the incipient stages of aural derangement has not yet received the general recognition which it is entitled to obtain. Parents too often regard diseases of the ear as trifling ailments which can be cured by ordinary domestic remedies. They treat very lightly deafness in their children, and flatter themselves with the false assurance that the disorder will pass away in time. A fetid discharge from the ear causes them very little anxiety, believing that "the running" is a natural method of relief which ought not to be checked by remedies. A very brief attendance in the aural department of any hospital will afford convincing evidence of my assertion, that a large number of chronic diseases of this class can be fairly attributed to indifference, and that permanent injury to the organ of hearing is frequently the outcome of ignorance and neglect during the early stages of the disorder.



The new aural inflator represented in the engraving is a contrivance designed to fulfil several important purposes in the practice of every-day aural surgery, and it is, in fact, a combination of several instruments, admitting of many useful applications. 1. It serves for inflating the middle ear as an ordinary Politzer's bag. 2. It can be used as an evacuator for the withdrawal of fluid by the Eustachian tube; or as a pneumatic tractor applied to the external auditory canal. 3. It can be employed also for the injection of medicated air charged with the vapour of deodorisers or other volatile fluids. When the instrument is to be applied for tubal inflation, the nasal piece should be adapted to the orifice of the nostrils by means of the wire loop which unites the vulcanite balls. The Eustachian catheter may be substituted for the nasal piece in those cases in which it is desirable to operate upon one ear only. The hand ball is especially fitted with very small valves and a central recoil spring. The end of one of the tubes attached to it must be fixed on the nasal piece for inflation, the end of the other tube for evacuation. Very gentle compression of the hand ball is sufficient for the withdrawal of fluid from the Eustachian tube and tympanic cavity; but the bag must be forcibly and rapidly manipulated for successful inflation. When medicated air is to be injected, the fluid selected must be dropped upon the pledget of cotton-wool placed in the conical vulcanite receptacle, which should then be adjusted on the end of the injecting tube. By the action of the hand ball the air is drawn through the perforated lid, and thus charged with vapour.

Now, it has been often asserted, and perhaps not without some truth, that aural surgery is both tedious and troublesome in practice; on the other hand, it must be admitted that there is no class of minor surgical operations which yields in the long run more satisfactory results. The success which follows the early treatment of catarrh of the middle ear by inflation is very gratifying to the practitioner, and sometimes astonishing to the patient. Already the timely application of politzerisation has done much to reduce the frequency of permanent deafness, and this simple and invaluable method of tubal inflation is fortunately serviceable in many forms of aural disease, and also in association with other important methods of treatment. Even in cases of long closure of the Eustachian tube and collapse of the tympanic membrane, it sometimes succeeds in restoring the normal communication between the tympanum and the pharynx, and this reopening of the tube is soon followed by great improvement in the hearing power. Sometimes the air-douche produces temporary deafness with a sensation of fulness and singing in the ears, but these symptoms gradually subside as the air confined in the tympanum becomes absorbed. This increased tension is especially liable to occur whenever the inflator is used too frequently, or with too much force; it can, however, be relieved at once by using my instrument, and evacuating the imprisoned air by simply reversing the action of the hand ball.

The gentle action of the evacuator is also useful under many other conditions. In young children suffering from earache the bag may be employed for the withdrawal of pent-up fluid into the pharynx. In acute suppurative inflammation of the middle ear, with bulging of the tympanic membrane, evacuation in this way may sometimes succeed, preventing the spontaneous rupture of the drum and removing the necessity of puncture. In chronic aural catarrh attended with deafness and tinnitus aurium the treatment by inflation may often be combined with evacuation with very excellent results. In many of these cases the Eustachian tube is narrowed and blocked with secretion, at the same time the contents of the tympanum are altered in structure and covered by a layer of thick and tenacious mucus. The air-douche alone is of little service. It aggravates the aural discomfort by increasing the abnormal pressure within the cavity, or else it fails to dislodge the pent-up secretion by the tube, so that the membrana tympani becomes unduly tense, and in this condition a repetition of the operation may cause serious injury.

Now, the treatment by alternate inflation and evacuation of the tympanum is certainly theoretically sound, and in my hands it has proved of great benefit in many chronic cases. It promotes the discharge of the inspissated secretion into the pharynx and aids in maintaining the drainage of the cavity. By the injection of air the mucus is disturbed from its position, and by reversing the action of the hand ball of my instrument, it can then be drawn into the tube, and its passage to the pharynx greatly accelerated. This double action is also capable of exerting a salutary influence over the bony chain. The mobility of the ossicles has long been impaired by the morbid condition of the tympanum, but by gently and repeatedly agitating them in both directions, their adhesions to each other are loosened, and their normal oscillation is re-established by which alone vibrations can be transmitted from the drum to the fluid within the internal ear. But the instrument can be used for many other purposes in aural surgery. The injecting tube can be readily connected with Ker's inhaler for the application of chloride of ammonia vapour, in cases of disorder of the mucous passages attended with profuse secretion. The injection of air charged with volatile vapours, such as carbolic acid, creasote, alcohol, iodine, eucalyptus, and other substances, is suggested as an auxiliary measure in chronic middle ear catarrh, requiring more active treatment than the air-douche, and also as a substitute for the injection of fluids into the tympanum.

After the failure of milder measures, however, in cases of obstinate tubal obstruction and thickening of the nasopharynx, the injection of warm solutions into the tympanum has been followed by considerable and even permanent relief. Mr. George Field expresses a decided opinion upon the value of this treatment, and considers "that the injection of appropriately selected warm fluids not only renders the Eustachian tube pervious, but prevents the accumulation of inspissated mucus in the tympanum." When solutions are employed for this purpose, the application of the handball evacuator after the operation will at all times prove of material assistance, for by its action the diffusion of the fluid is secured over the whole mucous lining and its final escape from the cavity promoted, mingled with the elements of secretion. In chronic cases also of collapsed and adherent membrane the indiarubber tube may be introduced into the external auditory canal and the instrument used as an exhauster for the purpose of drawing out the drum, and it thus acts as a substitute for the "pneumatic tractor" recently suggested by Dr. Woakes. The injection of deodorising vapour will be found especially valuable in cases of perforation and chronic otorrhœa—used, of course, in combination with astringent applications and persistent attention to aural cleanliness. By this treatment the patency of the drain tube of the tympanum is maintained, at the same time injected fluids and purulent secretions are blown out through the perforation, which would otherwise be retained in the cavity. It moreover powerfully aids in destroying the fetid odour which is constantly emitted with the discharge, and assists in promoting a cleanly state of the aural surfaces, which, after all, is the essential element of the treatment. All chronic suppurative diseases of the middle ear demand frequent modifications of treatment, and the persevering use of some form of antiseptic for a considerable period. In many cases the otorrhœa is soon checked by the regular employment of astringent solutions; but it often happens that, notwithstanding a marked improvement in the secretion, the distressing fetor continues, kept up by a localised disease of the tympanum, which involves the periosteum, and sometimes the bone itself. It is under these conditions that the vapour treatment is suggested as a valuable auxiliary to other remedies. The injection of medicated air causes no aural irritation, and it can be performed by the patient himself many times during the day as a substitute for other local applications.

In conclusion, I beg to submit my contrivance to the criticism of the profession, trusting that by its convertibility it will prove useful in the treatment of many common aural disorders. The instrument is very neatly made by Messrs. Maw, Son, and Thompson, and it can be obtained from them, together with a second hand ball and extra joint used by me to facilitate the operation of alternate inflation and evacuation of the tympanum. These additions are very convenient, as they obviate the necessity of shifting the tubes, and thus save both time and trouble. Care must be taken to attach one hand ball by the injecting tube and the other by the evacuating tube.

Southsea.

NOTE ON THE

TREATMENT OF URETHRAL GLEET BY MEDICATED METAL BOUGIES.[1]

By T. J. HUDSON, M.D., L.R.C.P. Lond.,
LATE SENIOR RESIDENT MEDICAL OFFICER, LEEDS PUBLIC DISPENSARY.

Chronic inflammation of the urethral mucous membrane or of the glands along its course is rarely benefited by oral medication, usually the reverse, and local applications as commonly carried out often fail us. During the last four years over eighty cases have come under my notice and been treated as follows. The urethral discharge having lasted beyond ten or twelve weeks from the initial gonorrhœal attack, the patient is placed on a hard bed or couch and a No. 4 Brodie's solid bulbous metal bougie, anointed with carbolic oil (1 in 20), is passed into the bladder, which has been previously emptied. Silver instruments should be used, as they are unacted on by chemical substances. If this procedure proves easy and is unaccompanied with much spasm or pain, the instrument is kept in ten minutes and the patient told not to urinate for some hours after. Unless much irritation or scalding result (when a longer interval is to be allowed), in four days' time a No. 6 instrument, anointed with resin ointment and iodoform (2 drachms to the ounce), is passed, and at once changed for a No. 8 or 10, which is kept in some twenty minutes. In another four days a No. 12, and then No. 14, are passed, the latter being the largest size used, and rather heavy, and kept in half an hour. If after a week's interval great improvement does not result, the same size is passed, again covered with iodide of sulphur ointment diluted to one-half with benzoated lard (animal fats penetrating better than the petroleum bases), and kept in from half an hour to two hours. In some of the most chronic and yet successful cases it was thus kept in from four to five hours at a stretch.

Over fifty of the cases were thus entirely cured, many of several years' duration and treated by other methods. The remainder either passed out of sight after one or two instrumentations or had also drugs by the mouth, usually sandal-wood oil and iodide of potash, with cinchona or tincture of cantharides with tincture of iron; while others showing a marked gouty, rheumatic, or strumous diathesis as the principal factor in keeping up the discharge had constitutional treatment as well as local. The ages ranged from seventeen to forty years. No bad results followed beyond a fleeting epididymitis in one case from the iodide of sulphur ointment being fresh and too strong, and at times temporary slight incontinence. A suspensory bandage was enjoined throughout the treatment, but rarely abstinence from stimulants other than spirits. The average duration of treatment was from four to five weeks.

I am aware that the plan of passing medicated instruments down the urethra in these cases is an old one, but usually they are withdrawn at once or almost directly. Such formerly was my practice, and effected little permanent benefit, the cases soon relapsing. The good result obtained, which is lasting, is, I believe, due to the long contact of the bougie and its medicament with the urethral canal. The cause of the long-continued discharge is, apart from stricture (which was present in but five of the above cases), mostly due to the spasmodic contraction of the urethral muscular and elastic fibres, reflex in character, which prevents the scattered patches of ulcerated or abraded mucous membrane from healing. Now, when the urethra is thus brought to the extreme limit of distension, and kept so for a sufficient period, this muscular action is paralysed and ceases to act, irritability being removed; analogous to the condition of the sphincter ani when dilated for fissure, in both cases some tearing of muscular or elastic fibre probably occurring.

The medicament also acts, when kept in contact for some time with the secreting surface or glands, as a stimulator, astringent, and healer, which continues *till at least* the next micturition. A germicidal effect probably also occurs in the less chronic cases, since Neisser has described a micrococcus in urethritis, rod-shaped, and rather like the bacteria of ulcerative balanitic pus. The medicament should be put thickly on to the bougie, and if slight narrowing of the meatus occurs, a slit in it is useful, or the ointment gets removed and fails to reach the affected parts.

In the form of ointment it is much more beneficial than as a liquid preparation, not excluding balsam copaivæ or dilute iron solutions. That the good results are not alone due to it—i.e., the medicament—is shown by a gum elastic solid bougie of similar size when anointed and passed doing little and often no lasting good, the patient often remarking that the "heavy" instrument did him most benefit. Now, this I take to be due to the fact that the former is somewhat compressible and compressed with effect by the urethra and yields. Not so the latter; for I found that the elastic one was often held tightly, however long kept in; the metal one, however, paralyses all resistance, and is quite free after a brief interval in the passage. It, moreover, acts with greater efficiency on irregularity, induration, and narrowing of the urethral canal and its submucous tissue, on fine granulations or warts, discharging lacunar, follicular, or mucous glandular abscesses, or merely the chronic blennorrhœal inflammation at either the fossa navicularis, beginning of membranous or (most often) bulbous portions of the urethra; also when shreds of glairy mucus are secreted due to relaxed and chronically inflamed prostate, and not alone curable by open blisters for some weeks to the perineum. The part affected is often indicated by fixed local increased sensibility on instrumentation.

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[1] Abstract of a paper read before the Leeds and West Riding Medical and Chirurgical Society.

Injections I never use, for it is very problematical if they ever reach the whole, or even a greater part, of the morbid mucous lining in these old cases, which is, however, effectually done by the above method. The same applies to the urethral irrigators once in vogue, three cases of their use by patients having been seen, and none being cured thereby. Iodoform and other soluble bougies, up to six inches in length, are often much objected to in private practice, from their objectionable smell, &c. They do not dilate the passage appreciably, and, though often formerly used, have never in my hands *per se* cured a case of long-standing gleet.

COCAINE IN OPERATIONS FOR FISTULOUS CANALS.[1]

BY J. G. BARFORD, L.R.C.P.L., M.R.C.S.

THE following case is interesting from two points of view: (1) as indicating the risk a patient appears to run in moving from a healthy country district to town to have a surgical operation performed, however skilfully done; and (2) the great value of cocaine as a local anæsthetic, even when considerable flesh wounds have to be inflicted, in cases where it is undesirable to administer a general anæsthetic from some idiosyncrasy in the patient.

A country clergyman, whose home is situate in an open, bracing, and exceptionally healthy locality, 600 feet above the sea, was the subject of hæmorrhoids, for which he was advised to place himself under the care of one of the best-known specialists for this affection. He went from the pure air of the country into a private surgical home for the purpose of having the hæmorrhoids removed. No difficulty was experienced in the operation, and the inner surface of the rectum healed readily, and remains sound up to the present time. But a few days after the operation some untoward constitutional symptoms presented themselves. The temperature rose to 104° and general febrile disturbance ensued. In a few days, pain, tenderness, and swelling displayed themselves along the perineum to the scrotum, and in due course a considerable accumulation of pus was apparent. A free incision was made, and with the discharge of pus the general symptoms improved. There was also another small accumulation of pus in the inner surface of the buttock, running up in the direction of the rectum. This, too, was freely opened. At the end of the fifth week from the operation the patient was removed in one of Ridding's invalid carriages into the pure air of the country. His general symptoms had somewhat improved; but the discharge from the wounds was very sanious, and far from healthy-looking; he was not making the progress a patient should do under the circumstances. His condition was one of evident septic infection. Two sinuses remained at the points of suppuration, about the depth of half an ordinary surgical probe, and leading to what appeared to be soft and easily broken-down tissue, threatening to work their way towards the rectum, or it might be into the urethra. The patient's condition at this time did not justify further operative interference. At the end of two months from the operation two other sinuses were formed in the perineum between the anus and the scrotum. One of these healed spontaneously, as, indeed, a sinus occasionally does. Two of the other sinuses communicated with each other. At the end of three months from the removal of the hæmorrhoids the patient's constitutional condition had sufficiently improved to justify further surgical interference, and it was decided to lay the sinuses freely open. The patient had, however, on previous occasions proved to be such a bad subject for general anæsthetics, that their administration was thought unjustifiable. I therefore decided to use cocaine to destroy the sensibility of the part. Some small plugs of cotton-wool were saturated with a 20 per cent. solution of cocaine, supplied by Mr. Martindale of Cavendish-street, and these were inserted into the sinuses, one plug in each, and allowed to remain for a quarter of an hour. They were then removed, and each sinus laid freely open with an ordinary bistoury and director. No pain whatever was felt by the patient in laying open two of the sinuses, the patient not knowing even when the incisions were being made. In laying the third sinus freely open a considerable portion of skin had to be cut through, and while the bistoury was passing through the skin the patient displayed some consciousness of it. The skin is evidently not so ready an absorbent of cocaine as either mucous membrane or an abraded surface. If I had again to use cocaine in an operation involving the skin, I should apply a little liquid blister to abrade the surface before the application of the cocaine. Exactly one drachm of the 20 per cent. solution was used. In operation with cocaine there is but little hæmorrhage, thus it is not unlikely to become a valuable remedy to restrain bleeding.

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[1] Read before the Pathological Society of Reading.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

A CASE OF POPLITEAL ANEURYSM; OPERATION; CURE; REMARKS.

(Under the care of Mr. RICHARD BARWELL.)

As Mr. Barwell says in his remarks, statistics have not yet been accumulated showing whether ligature of the femoral artery for popliteal aneurysm as at present carried out is as safe a method of treatment as compression of the femoral, either digital or by weight. There is no doubt that a large number of cases which are cured by compression are not published, and the experience of some hospital surgeons is that they have seldom been called upon to ligature the femoral artery for aneurysm, having found the former method sufficient. We would refer our readers to the cases of aneurysm published in THE LANCET of May 30th, p. 983, and also to the discussion on a paper read before the Clinical Society on April 24th, and published in THE LANCET, May 2nd, p. 799.

Benjamin S——, aged forty, boatswain, was admitted into Robertson ward on February 17th, 1885. The man is well and strongly built, of healthy family, and is at the present time in good health. He has never had syphilis, and is temperate. Four years ago he noticed a swelling behind the right knee, which caused considerable stiffness of the limb and some pain, but he took little notice of it for two years. He then underwent some treatment; the limb was bandaged, and an instrument (probably a tourniquet) was applied to the thigh for a fortnight, but no benefit resulted. The tumour remained, however, of much the same size until the beginning of the year, when he had a good deal of climbing on ladders to do, since which it rapidly increased. The leg being now very stiff and cumbersome, he obtained leave of absence and entered the hospital.

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After the failure of milder measures, however, in cases of obstinate tubal obstruction and thickening of the naso-pharynx, the injection of warm solutions into the tympanum has been followed by considerable and even permanent relief. Mr. George Field expresses a decided opinion upon the value of this treatment, and considers "that the injection of appropriately selected warm fluids not only renders the Eustachian tube pervious, but prevents the accumulation of inspissated mucus in the tympanum." When solutions are employed for this purpose, the application of the hand-ball evacuator after the operation will at all times prove of material assistance, for by its action the diffusion of the fluid is secured over the whole mucous lining and its final escape from the cavity promoted, mingled with the elements of secretion. In chronic cases also of collapsed and adherent membrane the indiarubber tube may be introduced into the external auditory canal and the instrument used as an exhauster for the purpose of drawing out the drum, and it thus acts as a substitute for the "pneumatic tractor" recently suggested by Dr. Woakes. The injection of deodorising vapour will be found especially valuable in cases of perforation and chronic otorrhœa—used, of course, in combination with astringent applications and persistent attention to aural cleanliness. By this treatment the patency of the drain tube of the tympanum is maintained, at the same time injected fluids and purulent secretions are blown out through the perforation, which would otherwise be retained in the cavity. It moreover powerfully aids in destroying the fetid odour which is constantly emitted with the discharge, and assists in promoting a cleanly state of the aural surfaces, which, after all, is the essential element of the treatment. All chronic suppurative diseases of the middle ear demand frequent modifications of treatment, and the persevering use of some form of antiseptic for a considerable period. In many cases the otorrhœa is soon checked by the regular employment of astringent solutions; but it often happens that, notwithstanding a marked improvement in the secretion, the distressing fetor continues, kept up by a localised disease of the tympanum, which involves the periosteum, and sometimes the bone itself. It is under these conditions that the vapour treatment is suggested as a valuable auxiliary to other remedies. The injection of medicated air causes no aural irritation, and it can be performed by the patient himself many times during the day as a substitute for other local applications.

In conclusion, I beg to submit my contrivance to the criticism of the profession, trusting that by its convertibility it will prove useful in the treatment of many common aural disorders. The instrument is very neatly made by Messrs. Maw, Son, and Thompson, and it can be obtained from them, together with a second hand ball and extra joint used by me to facilitate the operation of alternate inflation and evacuation of the tympanum. These additions are very convenient, as they obviate the necessity of shifting the tubes, and thus save both time and trouble. Care must be taken to attach one hand ball by the injecting tube and the other by the evacuating tube.

Southsea.

NOTE ON THE

TREATMENT OF URETHRAL GLEET BY MEDICATED METAL BOUGIES.[1]

By T. J. HUDSON, M.D., L.R.C.P. LOND.,
LATE SENIOR RESIDENT MEDICAL OFFICER, LEEDS PUBLIC DISPENSARY.

CHRONIC *inflammation of the urethral mucous membrane* or of the glands along its course is rarely benefited by oral medication, usually the reverse, and local applications as commonly carried out often fail us. During the last four years over eighty cases have come under my notice and been treated as follows. The urethral discharge having lasted beyond ten or twelve weeks from the initial gonorrhœal attack, the patient is placed on a hard bed or couch and a No. 4 Brodie's solid bulbous metal bougie, anointed with carbolic oil (1 in 20), is passed into the bladder, which has been previously emptied. Silver instruments should be used, as they are unacted on by chemical substances. If this procedure proves easy and is unaccompanied with much spasm or pain, the instrument is kept in ten minutes and the patient told not to urinate for some hours after. Unless much irritation or scalding result (when a longer interval is to be allowed), in four days' time a No. 6 instrument, anointed with resin ointment and iodoform (2 drachms to the ounce), is passed, and at once changed for a No. 8 or 10, which is kept in some twenty minutes. In another four days a No. 12, and then No. 14, are passed, the latter being the largest size used, and rather heavy, and kept in half an hour. If after a week's interval great improvement does not result, the same size is passed, again covered with iodide of sulphur ointment diluted to one-half with benzoated lard (animal fats penetrating better than the petroleum bases), and kept in from half an hour to two hours. In some of the most chronic and yet successful cases it was thus kept in from four to five hours at a stretch.

Over fifty of the cases were thus entirely cured, many of several years' duration and treated by other methods. The remainder either passed out of sight after one or two instrumentations or had also drugs by the mouth, usually sandal-wood oil and iodide of potash, with cinchona or tincture of cantharides with tincture of iron; while others showing a marked gouty, rheumatic, or strumous diathesis as the principal factor in keeping up the discharge had constitutional treatment as well as local. The ages ranged from seventeen to forty years. No bad results followed beyond a fleeting epididymitis in one case from the iodide of sulphur ointment being fresh and too strong, and at times temporary slight incontinence. A suspensory bandage was enjoined throughout the treatment, but rarely abstinence from stimulants other than spirits. The average duration of treatment was from four to five weeks.

I am aware that the plan of passing medicated instruments down the urethra in these cases is an old one, but usually they are withdrawn at once or almost directly. Such formerly was my practice, and effected little permanent benefit, the cases soon relapsing. The good result obtained, which is lasting, is, I believe, due to the long contact of the bougie and its medicament with the urethral canal. The cause of the long-continued discharge is, apart from stricture (which was present in but five of the above cases), mostly due to the spasmodic contraction of the urethral muscular and elastic fibres, reflex in character, which prevents the scattered patches of ulcerated or abraded mucous membrane from healing. Now, when the urethra is thus brought to the extreme limit of distension, and kept so for a sufficient period, this muscular action is paralysed and ceases to act, irritability being removed; analogous to the condition of the sphincter ani when dilated for fissure, in both cases some tearing of muscular or elastic fibre probably occurring.

The medicament also acts, when kept in contact for some time with the secreting surface or glands, as a stimulator, astringent, and healer, which continues till at least the next micturition. A germicidal effect probably also occurs in the less chronic cases, since Neisser has described a micrococcus in urethritis, rod-shaped, and rather like the bacteria of ulcerative balanitic pus. The medicament should be put thickly on to the bougie, and if slight narrowing of the meatus occurs, a slit in it is useful, or the ointment gets removed and fails to reach the affected parts.

In the form of ointment it is much more beneficial than as a liquid preparation, not excluding balsam copaivæ or dilute iron solutions. That the good results are not alone due to it—i.e., the medicament—is shown by a gum elastic solid bougie of similar size when anointed and passed doing little and often no lasting good, the patient often remarking that the "heavy" instrument did him most benefit. Now, this I *take to be due to the fact that the former* is somewhat compressible and compressed with effect by the urethra and yields. Not so the latter; for I found that the elastic one was often held tightly, however long kept in; the metal one, however, paralyses all resistance, and is quite free after a brief interval in the passage. It, moreover, acts with greater efficiency on irregularity, induration, and narrowing of the urethral canal and its submucous tissue, on fine granulations or warts, discharging lacunar, follicular, or mucous glandular abscesses, or merely the chronic blennorrhœal inflammation at either the fossa navicularis, beginning of membranous or (most often) bulbous portions of the urethra; also when shreds of glairy mucus are secreted due to relaxed and chronically inflamed prostate, and not alone curable by open blisters for some weeks to the perineum. The part affected is often indicated by fixed local increased sensibility on instrumentation.

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[1] Abstract of a paper read before the Leeds and West Riding Medical and Chirurgical Society.

Injections I never use, for it is very problematical if they ever reach the whole, or even a greater part, of the morbid mucous lining in these old cases, which is, however, effectually done by the above method. The same applies to the urethral irrigators once in vogue, three cases of their use by patients having been seen, and none being cured thereby. Iodoform and other soluble bougies, up to six inches in length, are often much objected to in private practice, from their objectionable smell, &c. They do not dilate the passage appreciably, and, though often formerly used, have never in my hands *per se* cured a case of long-standing gleet.

COCAINE IN OPERATIONS FOR FISTULOUS CANALS.[1]

BY J. G. BARFORD, L.R.C.P.L., M.R.C.S.

THE following case is interesting from two points of view: (1) as indicating the risk a patient appears to run in moving from a healthy country district to town to have a surgical operation performed, however skilfully done; and (2) the great value of cocaine as a local anæsthetic, even when considerable flesh wounds have to be inflicted, in cases where it is undesirable to administer a general anæsthetic from some idiosyncrasy in the patient.

A country clergyman, whose home is situate in an open, bracing, and exceptionally healthy locality, 600 feet above the sea, was the subject of hæmorrhoids, for which he was advised to place himself under the care of one of the best-known specialists for this affection. He went from the pure air of the country into a private surgical home for the purpose of having the hæmorrhoids removed. No difficulty was experienced in the operation, and the inner surface of the rectum healed readily, and remains sound up to the present time. But a few days after the operation some untoward constitutional symptoms presented themselves. The temperature rose to 104° and general febrile disturbance ensued. In a few days, pain, tenderness, and swelling displayed themselves along the perineum to the scrotum, and in due course a considerable accumulation of pus was apparent. A free incision was made, and with the discharge of pus the general symptoms improved. There was also another small accumulation of pus in the inner surface of the buttock, running up in the direction of the rectum. This, too, was freely opened. At the end of the fifth week from the operation the patient was removed in one of idding's invalid carriages into the pure air of the country. His general symptoms had somewhat improved; but the discharge from the wounds was very sanious, and far from healthy-looking; he was not making the progress a patient should do under the circumstances. His condition was one of evident septic infection. Two sinuses remained at the points of suppuration, about the depth of half an ordinary surgical probe, and leading to what appeared to be soft and easily broken-down tissue, threatening to work their way towards the rectum, or it might be into the urethra. The patient's condition at this time did not justify further operative interference. At the end of two months from the operation two other sinuses were formed in the perineum between the anus and the scrotum. One of these healed spontaneously, as, indeed, a sinus occasionally does. Two of the other sinuses communicated with each other. At the end of three months from the removal of the hæmorrhoids the patient's constitutional condition had sufficiently improved to justify further surgical interference, and it was decided to lay the sinuses freely open. The patient had, however, on previous occasions proved to be such a bad subject for general anæsthetics, that their administration was thought unjustifiable. I therefore decided to use cocaine to destroy the sensibility of the part. Some small plugs of cotton-wool were saturated with a 20 per cent. solution of cocaine, supplied by Mr. Martindale of Cavendish-street, and these were inserted into the sinuses, one plug in each, and allowed to remain for a quarter of an hour. They were then removed, and each sinus laid freely open with an ordinary bistoury and director. No pain whatever was felt by the patient in laying open two of the sinuses, the patient not knowing even when the incisions were being made. In laying the third sinus freely open a considerable portion of skin had to be cut through, and while the bistoury was passing through the skin the patient displayed some consciousness of it. The skin is evidently not so ready an absorbent of cocaine as either mucous membrane or an abraded surface. If I had again to use cocaine in an operation involving the skin, I should apply a little liquid blister to abrade the surface before the application of the cocaine. Exactly one drachm of the 20 per cent. solution was used. In operation with cocaine there is but little hæmorrhage, thus it is not unlikely to become a valuable remedy to restrain bleeding.

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[1] Read before the Pathological Society of Reading.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

CHARING-CROSS HOSPITAL.

A CASE OF POPLITEAL ANEURYSM; OPERATION; CURE; REMARKS.

(Under the care of Mr. RICHARD BARWELL.)

As Mr. Barwell says in his remarks, statistics have not yet been accumulated showing whether ligature of the femoral artery for popliteal aneurysm as at present carried out is as safe a method of treatment as compression of the femoral, either digital or by weight. There is no doubt that a large number of cases which are cured by compression are not published, and the experience of some hospital surgeons is that they have seldom been called upon to ligature the femoral artery for aneurysm, having found the former method sufficient. We would refer our readers to the cases of aneurysm published in THE LANCET of May 30th, p. 983, and also to the discussion on a paper read before the Clinical Society on April 24th, and published in THE LANCET, May 2nd, p. 799.

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On examination a tumour with expansile pulsation was found in the left popliteal space: it was ovoid in form, measuring 3 in. in the vertical and 2½ in. in the transverse direction; pulsation without tumefaction could be felt beyond these limits. All the characteristics of aneurysm with the exception of bruit were present; the sac lay pretty close to the skin, and had evidently but little clot within it. Flexion of the knee carried as far as seemed safe produced no alteration in the force of the pulsations. Mr. Barwell stated that in consequence of the absence of clot in the sac, and also in view of the fact that pressure had already failed, any good results from such treatment could hardly be expected, but he thought it only right that it should be tried. A conical-shaped bag, filled with four pounds of shot, was suspended by a horizontal support over the bed, so that when placed in position its whole weight would fall on the required part. The man, very intelligent and amenable, was shown how to hold this bag upon the femoral artery at the groin, whose course and position were marked by a narrow strip of plaster, which he could plainly feel with the finger. The pressure of the bag entirely annihilated pulsation at the aneurysm, and he was enjoined to continue it as long as it could be borne.

Feb. 21st.—Pressure from 8 A.M. to 12; from 1 P.M. to 5 P.M.; from 5.30 to 8.30: 11 hours.

22nd.—Pressure from 6 A.M. to 12; from 1.30 P.M. to 6 P.M.; from 6.30 to 10 P.M.: 14 hours.

23rd.—Pressure from 6.30 A.M. to 12; from 1 P.M. to 5.30 P.M.; from 6 to 9.30: 13½ hours.

24th.—Pressure from 6.30 A.M. to 12.

On careful examination of the aneurysm Mr. Barwell could find no sign of improvement; indeed, the tumour appeared a little larger laterally. The groin, although the skin was quite normal, was slightly tender on pressure. The man stated that his leave only lasted up to a certain date, and he begged that an operation might be performed, so that he could get back to his ship, otherwise he would lose his appointment.

26th.—Mr. Barwell tied the superficial femoral with an ox aorta ligature at the apex of Scarpa's space, turning aside the saphenous vein and the inner edge of the sartorius; singularly little blood came from the incision. The tumour became immediately pulseless, harder, and smaller. A drainage-tube and carbolic gauze dressing were used.

27th.—A little venous oozing had come through the bandage; dressings changed; drainage-tube shortened. The man has had no pain. General temperature normal; that of both limbs equal, 98·4°.

March 3rd.—Wound healed, with exception of a passage for the drainage-tube, which was removed. The aneurysm has had no pulsation in it since the operation; it is rapidly decreasing in size, and is perfectly hard.

14th.—The patient has been begging for some days to be dismissed; to-day he was discharged. It was thought by some observers, but negatived by others, that there was some slight pulsation in the posterior tibial artery.

Remarks by Mr. Barwell.—The treatment of aneurysm by pressure was studied and perfected at a period of surgery when the result of all operations, but, perhaps, more especially that of deligation, was singularly unfavourable, or, to say the least, uncertain. Cleanliness and purity in the treatment of wounds were but little studied; the use of silk ligatures establishing a suppurating tract communicating with an artery ulcerating in close proximity to a vein exposed to risks which at this day seem terrible to contemplate. Now, incised, clean, and non-putrefying wounds such as we make to reach the vessel heal at once, and our ligatures no longer cause suppuration. Future statistics, sufficient materials for which have not yet accumulated, will show whether deligation as now practised is or is not as safe or safer than proximal pressure. Of all forms of ligature I hold that which being flat does not divide any vascular coats to be by far the safest. Of those made from the tendon of the kangaroo's tail I have neither personal experience nor the means of collecting numbers. Of those made from the ox aorta I can, I believe, give all the cases—viz.:

Number of cases.		Number of vessels tied.
1	Innominate	1
2	Carotid alone	2
4	Carotid and subclavian	8
2	Iliac[1]...	2
1	Common femoral	1
8	Superficial femoral	9
1	Brachial	1
—		—
19		24

In none of these cases did any secondary hæmorrhage occur from the place of deligation.[2] Mr. Thomson's patient (deligation of the innominate) died by hæmorrhage from an ulcerated opening in the subclavian; no other patient has succumbed. Thus in nineteen patients twenty-four vessels have been tied with the ox aorta ligature, and with that one exception of innominate deligation (which has never yet proved successful) no death has occurred; no amputation or other infelicitous result. It will be observed that among the deligations of the above table are the largest vessels that can be tied; the results may be contrasted with those of proximal pressure for popliteal aneurysm. I collected two years ago[3] all published cases—viz., 148. Of these 6·8 per cent. either died or submitted to amputation. The cases collected from six hospitals showed even less favourable results—viz., 8·8 per cent. either underwent amputation or died. Moreover, of the whole number, those gathered from journals and those taken from hospital records, 49·5 per cent. failed. If we consider the confinement, the anxiety, the pain that patients thus treated undergo; if we consider the disappointment when failure is announced; and, above all, when we consider the death-rate,—we shall probably find it desirable to reconsider an idea which has taken root with us, that proximal pressure is a safer and a milder treatment than a carefully performed and scientifically conducted deligation.

WEST KENT HOSPITAL, MAIDSTONE.

RAPIDLY-GROWING SARCOMA OF THIGH; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. Knowles.)

Alfred W——, aged twenty-seven, married, came to the out-patient department, on Jan. 7th, with the following history:—The patient is a farrier. A week ago he was kicked by a horse on the outer side of the left leg, a little above the knee-joint. Some swelling of the part took place at once, accompanied by a good deal of pain. He had been able to work since; the swelling, he thought, had gone down a little, but he still complained of aching pain over the site of the injury. On examining the limb, a diffused swelling occupied the lower fourth of the outer side of the left thigh; smooth, immovable, and apparently deeply seated; firm, but pitting slightly on pressure; slight ecchymosis of skin; no inflammatory appearance, and the circulation in the leg below unaffected by it. The patient was unwilling to come into the house; he attended on the 14th, and again on the 21st, when he was persuaded to come in.

On admission, Jan. 22nd, he was a pale strumous-looking man, fairly well nourished; tongue furred; bowels confined. Morning temperature 99°, evening 100°. Lung sounds normal; heart sounds normal; hepatic and splenic dulness normal; axillary and inguinal glands about the size of peas. Urine: specific gravity 1012, acid; excess of phosphates; no albumen.

Family History.—Is one of nine children. One brother had been in Guy's Hospital for pulpy disease of synovial membrane of the knee-joint, and the joint was excised. Amputation of the thigh was subsequently performed; another died in infancy of fits. The rest, with parents, are living and well. The swelling has considerably increased in size and encroaches upon the anterior surface of the thigh; the lower margin is prominent and well defined; the upper is lost in the general thickness of the thigh; distinct veins cross the tumour; skin freely movable over it; over the most prominent part there was a sense of fluctuation. The left inguinal glands enlarged to the size of an olive, but not hardened. The circumference of the left thigh at the lower third measured seventeen inches and a half; right thigh ten inches and a half. There was some œdema of the left foot and slight flexion of the leg on the thigh.

Jan. 26th.—A distinct sense of resistance felt above Poupart's ligament, with tenderness on pressure; slight œdema of the thigh; circumference 18½ in.

Feb. 2nd.—Superficial abdominal veins over the left side distinct. A well-defined mass can now be easily mapped out occupying the left iliac fossa, reaching as high as the anterior superior spine, and encroaching upon the hypogastric region. Dulness and sense of resistance felt over the back of the left lumbar region; and corresponding to the position of the left kidney is an elastic ovoid swelling, 2 in. by 1 in., somewhat painful on pressure, and with marked sense of fluctuation. Circumference of thigh 19⅜ in.

12th.—Patient getting thin; anæmia more marked; complains of some difficulty in swallowing; troublesome cough, with scanty glairy expectoration, dulness over the base of the right lung, with coarse râles and bronchophony. Morning temperature 98°, evening 100·5°; pulse 80, small and weak. Some epistaxis.

19th.—Emaciation marked; cough more troublesome;

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[1] One of these was the external. In one it was doubtful whether the external or the common iliac was tied.

[2] In Mr. Thomson's case of deligation of the innominate, secondary hæmorrhage arose from suppuration of the wound opening into the subclavian a considerable distance from the ligature. During my operation on the common femoral a free gush of blood, probably from an enlarged superficial circumflex, occurred as the outer part of the sheath was opened; it ceased when the ligature was tightened, but recurred in seven days, and again seven days later. It was definitively suppressed by tying the vessel above and below, dividing it between the ligatures.

[3] Encyclopædia of Surgery, Art. Aneurysm, vol. ii., p. 463.

coarse râles over both the lungs except apices; night sweats; pulse very feeble, and respiration laboured. Circumference of left thigh 19½ in.; right thigh 10¼ in. The growth now involves the popliteal space, and extends upwards as high as the great trochanter. Some thinning of the integuments over the more prominent part of the tumour, with distinct fluctuation; no pulsation; the superficial veins of the thigh and the left side of the abdomen more engorged and increased œdema of the leg and thigh; no increase of size or hardness of the inguinal glands; in the abdomen the area of dulness and resistance extended as high as the umbilicus, and a little beyond the median line, it being a well-defined, smooth, hard mass; increased resistance felt over back of left lumbar region, and an increase of the swelling occupying the position of the left kidney to three inches and a half by two inches (the long axis parallel to spine); urine gave the same reactions as before.

26th.—Patient extremely emaciated; bedsores over right hip and knee-joint; he takes very little nourishment on account of great difficulty in swallowing; death occurred the following day.

Post-mortem (Feb. 28th).—Rigor mortis present. The left thigh looked about double the size of the right, there being a difference of 9¼ in. in the circumference. An incision from the great trochanter to the external condyle of the femur, and carried down to the bone, revealed the following: The whole of the soft parts of the thigh were infiltrated with a pulpy reddish-brown granular-looking mass, which could be easily scraped away with the finger, not encapsuled and apparently limited below by the attachment of the fascia to the bony prominences around the knee-joint. There was another form of growth which presented a different naked-eye appearance; it was limited in extent, and arranged in lobules of various sizes, greyish-white in colour, and of firm consistence, exactly resembling a section of the brain. Several small *blood-cysts* permeated the growth. The periosteum was smooth, and as far as the finger could ascertain the bone was not affected. An incision along the anterior surface of the thigh showed the same characters. On opening the abdomen, the peritoneum and sigmoid flexure of the colon were seen to be displaced upwards by a large mass, which occupied the whole of the left iliac fossa; this mass was encapsuled and of varying consistence, it spread over the posterior abdominal wall, and reached as high as the pelvis of the kidney; that portion between the kidney and posterior abdominal wall, and which corresponded to the external swelling, was *semi-fluid* in consistence. A section through the mass above Poupart's ligament presented the same characters as the primary growth. Two encapsuled tumours, each the size of an orange, were situated on the under surface of the diaphragm, one between the layers of omentum on the greater curvature of the stomach and two others near the crest of the ilium on the right side. Liver: Enlarged (weight sixty ounces), pale, capsule tense, parenchyma soft and easily broke down under the finger, several greyish-white spots about the size of a pin's head scattered throughout the organ. Pancreas: Entirely filled with a firm yellowish-white mass, the gland felt like a piece of indiarubber. Kidneys: Pale, otherwise normal. Spleen: Capsule lax, pulp very soft, of a bluish colour on section, turning a brick-red colour on exposure to air. Lungs: Some pleuritic adhesions over both; a few ounces of fluid in the right pleura; both lungs thickly studded with firm, greyish-white deposits, varying in size from a pea to a bean; both bases œdematous. Anterior and posterior mediastina contained numerous encapsuled masses of the soft pulpy form, and the bronchial glands around the roots of the lungs were involved in a mass similar in appearance to that deposited in the lungs and pancreas. Under the microscope it was seen to be a small round-celled sarcoma. The secondary deposits showed a few elongated spindle-shaped cells, but beyond these all the specimens examined presented great uniformity of appearance.

Remarks by MR. KNOWLES.—This case offers a good illustration of the high degree of malignancy of round-celled sarcoma. The rapidity and extent of its growth, terminating fatally within two months, show the necessity of making an early diagnosis in cases where surgical interference is contemplated. When first seen it was very difficult to say whether the swelling was due to an extravasation of blood or a new growth. It did not appear to be connected with the bone, although from its position the question of sarcoma was entertained from the first. A fortnight later, when admitted into the house, there could be no doubt as to its malignant nature; and four days after admission, and before permission to amputate the limb had been obtained, the deposit was detected above Poupart's ligament. It would seem that an extravasation of blood took place at the time of the injury, and that this, instead of being followed by resolution or suppuration, as might have been expected in a strumous diathesis, assumed malignant characters. The growth was twice aspirated with a fine needle, and each time a little blood was withdrawn, but no sarcomatous cells were detected under the *microscope*.

LIVERPOOL ROYAL INFIRMARY.

CASES OF ABDOMINAL SECTION; CONVALESCENT; REMARKS.

(Under the care of DR. WALLACE.)

FOR the notes of these cases, to which reference was made in our last issue, we are indebted to Mr. Laimbeer.

CASE 1. *Salpingitis.*—J. S——, aged twenty-eight, has been ill four years. She was admitted to hospital in July, 1884, and has been under treatment since. She suffers from pains in the pelvis, and is unable to work, lately even to move in bed. Operated on, March 4th, 1885. Both tubes were removed, but both ovaries left; the right tube was enlarged and thickened; both were congested. The patient made an *uninterrupted* recovery, and is now able to walk well.

CASE 2. *Hysterectomy, &c.: Multiple Fibroids.*—C. C. A——, aged forty, a widow, has been under treatment since July, 1882, for fibroids of the uterus; she is getting worse, and cannot work on account of pain. Operated on, March 10th, 1885. Abdominal section and removal of pedunculated fibroid; also of the uterus, with a mass of intramural fibroids. The cervix formed the stump, and was brought to the abdominal wall in the median line. The serre-nœud was used. The wire of the serre-nœud cut through on April 11th, the patient doing well.

CASE 3. *Adherent Dermoid Cyst.*—L. McR——, aged twenty-two, noticed a swelling of the abdomen at Christmas last. Operated on, March 25th; abdominal section. The cyst was universally adherent. It was cleared of its contents (hair and cheesy matter resembling pus), and a drainage-tube left in. The cyst has now contracted to a small sinus, about two inches and a half long. The patient's general health is good.

CASE 4. *Ovarian Cystoma.*—E. McK——, aged twenty-eight, noticed an abdominal swelling six months ago. Operated on, March 26th. A multilocular ovarian cyst of the right side was removed. The patient's recovery was slightly retarded by the formation of an abscess in the abdominal wall. Is now quite well.

CASE 5. *Disease of Oviducts and Ovaries (?).*—M. J. B——, aged thirty-one, has been under treatment for more than twelve months with very severe pain and reflex ovarian symptoms, the patient occasionally losing all self-control, and threatening to commit suicide; profuse menorrhagia.—Nov. 14th, 1884: Abdominal section. The ovaries contained small cysts. The cysts were pricked; the Fallopian tubes were stilettoed. Uninterrupted recovery. No improvement after this operation.—April 2nd, 1885: Abdominal section done again. Both ovaries and tubes taken away. The patient made an uninterrupted recovery. She feels quite well. She menstruated for forty-eight hours three days after the operation.

Remarks by DR. WALLACE.—Cases 1 and 5 were both subjects of intense neuroses, the former being able to grow a phantom tumour under inspection of abdomen, for which there was nothing to account except salpingitis; while the latter was twice operated upon by abdominal section, for such intense pain in lower abdomen as drove her frantic and made her threaten suicide. Both tubes were dilated and filled with serous fluid; the ovaries were apparently healthy. On the first operation a piece was cut out of the right oviduct; the left burst on attempting to detach it from adhesion to the left pelvic wall. No relief followed. Ovaries and tubes were next removed. Her neuroses have vanished. Why excision of the oviducts in the first case gave complete relief, the ovaries being left behind, while in the latter case opening the oviducts, taking off pressure of distension and draining—all true surgical procedures—gave no relief, I am not prepared to venture an opinion. The mental impression in neurotic patients is sometimes so great that opening the abdomen and doing nothing except draining cures them. Spaying women must always be a repulsive proceeding, and it is one very apt to be abused. The cases of hysterectomy and dermoid cyst cured by drainage are interesting in their way.

Medical Societies.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

At a meeting of the Society on the 13th ult.,

Dr. E. F. Willoughby read a paper on Variola and the Varioloid Diseases of Animals. He said that a number of animals—as the sheep, goat, camel, swine, and according to some the dog—are subject to diseases resembling in all their phenomena that known as small-pox in man, and which may therefore be called variola humana, ovina, caprina, camelina, &c. They are all highly infectious to animals of the particular species to which they belong, attended by high fever, a general vesicular or pustular eruption, and great danger to life; not communicable to animals of other species except by direct inoculation, and then producing a local affection only, with little constitutional disturbance and no danger to life. One attack, however induced, confers immunity against the particular disease, but they are not mutually protective. Horse-pox and cow-pox differ in several essential features from the foregoing; they are purely local affections, unattended by much fever or any danger, are not infectious, but, though said to appear spontaneously in rare instances, are communicable only by inoculation, when they confer immunity not only against subsequent inoculations, but also against the infection or inoculation of human small-pox. Though experiment shows that they can be inoculated on any part of the body of horses and cattle of either sex and of any age, the so-called spontaneous cases are always seen to occur on the heels of horses, the udders of milk-cows, and the lips of sucking calves. On these facts two opposed theories have been built: one, which may be called the French doctrine, though accepted by Böllinger in Germany and Fleming in this country, is that there are two orders of variolæ, in one of which the virus is, as Fleming expresses it, "volatile," and in the other "fixed." In other words, while inoculation with small-pox protects man against small-pox, and inoculation with sheep-pox protects the sheep against sheep-pox, though small-pox does not protect against sheep-pox, nor sheep-pox against small-pox, yet cow-pox and horse-pox confer immunity not only against one another, but against a totally unlike disease—namely, small-pox. The other, and certainly the correct view, held by the best authorities in England and Germany, except those above mentioned and by Dr. Warlomont, is that while the variolæ proper are so many distinct specific diseases, peculiar to the respective animals, though capable of being communicated in a modified form to others by direct inoculation, cow-pox and horse-pox are not independent diseases, but merely instances of the cultivation of human small-pox in the organism of another animal. Since "vaccination" has been proposed as a prophylactic measure against sheep-pox, and other suggestions of a like kind have been made from ignorance of the true relations of these diseases, it is of the highest importance that the law of immunity should be clearly understood. It may be expressed in four theses: 1. One attack of variola of the kind proper to any animal protects the individual against subsequent infection or inoculation with the same. 2. Inoculation of any animal with the virus of its own variola produces a milder form of the same disease, but affords a protection similar to that conferred by an attack acquired by ordinary infection. 3. Any variola inoculated in an animal other than that whose variola it is, gives rise to a peculiarly modified form of the disease, attended by little constitutional disturbance, merely local congestion, and no danger to life; such modified disease being no longer communicable to any other animal of the same or of different species except by direct inoculation. 4. This modified disease affords a considerable degree of immunity against infection by any means whatever with the variola whence it was derived, either to the animal whose variola was the original source of it, or to others capable of being infected in any way thereby.—In the discussion which followed, the President, Drs. Renner, Pringle, Gordon, C.B., Murray, and Mr. Shirley Murphy took part.

ACADEMY OF MEDICINE IN IRELAND.

Sloughing of the Rectum.—Acute Pneumonia.

At a meeting of the Medical Section on Feb. 27th,

Dr. W. M. A. Wright read a paper on a case of Sloughing of the Rectum. The patient, a lady aged sixty-five, who had had piles for the last twenty years, but who was in other respects quite healthy, who led an active out-door life, and whose bowels were stated to have always acted most regularly, became ill on Jan. 22nd, 1884. When visited on the following day she said her piles had become inflamed, and on examination a ring of them was found external to the anus, nipped by the sphincter, much congested, very tender, and irreducible. Anodyne treatment was adopted locally and generally. On the 25th profuse leucorrhœa set in, and on the 27th complete retention of urine, which lasted for eight days. On the 28th diarrhœa came on, and the skin over the gluteus maximus on both sides of the anus, but especially the right, became very tense, red, glazed, and erysipelatous looking. On Feb. 1st an external opening formed on the right side, about an inch from the anus, and almost all the fæces began to pass through it; by the 4th power over the bladder was regained, and the inflammation had sufficiently subsided to allow of a rectal examination, when an enormous mass of fæces was found, broken up by the finger, and partially removed by an enema; daily enemata removed the entire mass by the 10th. When the fæcal tumour was partially got rid of, the internal opening was made out clearly, about one inch and an half up the gut on the right side, and as large as a half-crown piece. On the 14th a secondary abscess, with odourless pus, opened into the fistula, after which recovery was uninterrupted. Dr. Wright remarked that the inflammation of the piles and the sloughing of the rectum were undoubtedly caused by the pressure of the fæcal mass (just as a fœtal head may cause sloughing of the vagina in the second stage of a tedious labour); the periproctitis and erysipeloid condition of the skin over the buttock were caused by the escape of the fæces into the cellular tissue of the ischio-rectal fossa. No cases quite analogous were found recorded. The retention of urine was probably after. A vaginal examination would have revealed the cause sooner, but could not have altered the treatment. The patient, when last seen, nine months after the attack, had quite recovered; the fistula was completely closed, the bowels regular, and no symptoms of stricture present. Operative interference was refused when it became practicable.—Dr. Finny referred to a case under his care in which a vaginal examination revealed the true cause of the symptoms to be a mass of impacted fæces in the rectum.—The President mentioned that the late Sir Dominic Corrigan used to lay down that when a diarrhœa obstinately continued, the rectum should always be examined, and it would often be found that there was either fæcal accumulation or cancerous ulceration.—Dr. Wright briefly replied.

Dr. Walter Smith read notes of four cases of Acute Pneumonia occurring in members of the same family at or about the same time. Case 1. Boy, aged sixteen years, first seen on third day of illness. A very severe case, terminating fatally on the morning of the ninth day. The respiration was rarely below 60, and there was constant delirium. Right lung first affected; then the left lung involved. Case 2. Boy, aged thirteen years, seen on the second day of illness. Pneumonia of base of right lung spreading on fourth day to base of left lung. Crisis on the ninth day, and good recovery. Case 3. The youngest boy, aged seven years, seen on first day of illness. Pneumonia of right base. A mild case terminating by crisis on fourth day. Case 4. An adult sister of these boys had been ailing for some time with a severe cough, but struggled on until obliged to give up. Pneumonia of the left base ending favourably by crisis. The four cases developed within a few days of each other. The chief point of interest, suggested by examples of multiple cases, is their etiology—that is, are they instances (*a*) of epidemic pneumonia; (*b*) of infectious pneumonia imported into a house and spreading from person to person; or (*c*) of pythogenic pneumonia? The sanitary condition of the house in which these patients lived was very indifferent, but the author observed that the report on Acute Pneumonia of the Collective Investigation Record, vol. ii., furnished no ground for asserting that multiple pneumonia is associated with exceptionally bad sanitation.—Surgeon-General De Renzy called attention to the frequency of epidemics of pneumonia in the Punjaub, and believed the disease was of an infectious character.—Dr. W. Wright mentioned two cases parallel to those noted by Dr. Smith.—Dr. J. W. Moore espoused the view that pneumonia should rather be styled pneumonic fever, and thought that a correlation existed between pneumonia and enteric fever as regards prevalence.—Drs. C. F. Moore and Doyle also joined in the discussion, and Dr. Walter Smith replied.

Multiple Exostoses.—Cutaneous Epithelioma.

At a meeting of the Pathological Section on March 13th, Professor Thornley Stoker read a paper on the Pathology of Multiple Exostoses, and exhibited the bones of a skeleton affected by them to a remarkable degree. Most of the bones were engaged, and a great degree of symmetry existed between the outgrowths of opposite sides. The lower extremities presented the most pronounced deformities, and showed the two forms of exostoses which Professor Stoker stated to be more common than is generally supposed, and which he discovered in a great number of persons in whom no previous exciting cause could be traced—that is to say, a growth projecting upwards from the lower part of the internal condyloid ridge of the femur, and one projecting downwards from the internal tuberosity of the tibia. Although these deformities and kindred ones are often begotten of some inflammatory process, the result of injury, syphilis, rheumatism, or such like, he expressed his view that they frequently arise as a result of some hyperactivity in the bone-forming tissues, and without any inflammatory cause. He referred to the objection to any classification of bony growths which divided them into hyperplastic and heteroplastic, as they belong to the connective-tissue group of structures, and are always truly hyperplastic, originating in the connective tissues, even when found in situations and organs the most remote from normal bone. Attention was also drawn to the similarity which exostotic growths show to some of the conditions found in the healthy bones of lower animals, and, when occurring in tendons, to the osseous tendons of birds, and a suggestion was thrown out that such conditions give evidence that disease in many ways resembles a retrograde metamorphosis, and as such is interesting to the morphologist.—The President asked Professor Stoker in what condition did he find the cartilages. Were the larynx and bronchial and tracheal cartilages affected, and did the membranes of the interior of the skull show any tendency to bone deposit?—Professor Bennett said in the cases before the Section there was not a shadow of evidence in favour of any inflammatory process having been the cause of the ossification. Again, the ossification was not in the muscles, but in their sheaths. On the other hand, ossifying myositis rather began by destroying the muscles and then producing ossification of the sheaths. He therefore objected to the term myositis ossificans as descriptive of such a skeleton, because it tacked on a theory not justified by the facts. These went to show that the disease was congenital and started in early life, and that the ossification proceeded in a manner the reverse of that which prevailed in true ossifying myositis, and was not inflammatory. In the skeleton described by Bookey, and preserved in the College Museum, and also in cases recorded by himself (Professor Bennett) and one or two others, the disease commenced in early life, and proceeded slowly along the muscles first, and implicated the bone afterwards. In the present case the disease began in the bone, and grew into the tendons afterwards.—Professor Cunningham observed that an interesting point was the connexion between these pathological changes in bones and morphological changes. Professor Stoker seemed to assume that the changes were always of a degenerative kind. That might be the case in the majority of instances, but frequently they had instances of pathological changes helping the morphological alterations. A change in the habits of an animal sometimes rendered a ligament necessary in the place of a muscle, and then the latter underwent changes which converted it into a ligament. Such changes were distinctly pathological. During the present session in the dissecting-room of Trinity College a young male subject was met with who exhibited these changes on both sides of the body, and to a much greater extent than the specimen handed round, and both Professor Bennett and himself were inclined to think that it was due to some peculiar occupation which had been followed by the individual.—Dr. Foy observed that morphological changes produced by pathological conditions could not always be considered as disadvantageous. The so-called degradation of tissue produced by pathological processes might serve a useful purpose, as was shown in some of the lower animals—a fact first clearly shown by Herbert Spencer in the second part of his work on Biology, published in 1865 and 1867. It was established in the well-known case of the turkey, where the muscle corresponding to one of the human adductors was usually found ossified. That those changes commenced early in life could not, he (Dr. Foy) thought, be questioned, as the period of selection in the protoplasm for minerals must have preceded its differentiation.—Professor Stoker, in reply, said the bronchial and tracheal cartilages were not affected in his specimen, nor were there any signs of ossification in the brain, and the membranes of the latter were not particularly adherent. The cartilages of the joints were singularly perfect, notwithstanding that there were so many changes in the neighbourhood of the joints. The os innominata presented a good deal of bony change, like that which was seen in chronic rheumatic arthritis, but the acetabulum was very little changed. He agreed with Professor Bennett that there was no evidence that the condition in question was the result of inflammation; and he had only used the name to which exception had been taken until a better one was found. He believed that the ossifying process began in the connective tissue of the muscle, and proceeded from the muscle towards the bone, forming a secondary connexion with it. He did not think there was proof of the statement that myositis ossificans was usually congenital. In Dr. Bookey's case, the girl, who died at the age of twenty-six, was known to have been healthy up to the age of five, at which period the changes in her muscles began.

Dr. Ball read a paper on cases of Cutaneous Epithelioma occurring amongst the operatives at a tar distillery. The first case came under notice four years ago, when Dr. Ball removed the front of the scrotum for an epithelioma, which had been preceded by a hard, horny wart. A recurrence took place at the side of the scrotum, not involving the operation cicatrix; this was extirpated two years ago, and since then the patient has remained well. The second case was that of an old man, about eighty years of age, who had an extensive epitheliomatous ulcer on the back of the left hand, which had originated in a wart five or six years previously. On the dorsum of the right hand, and for a distance of about two inches above the wrist, there were numerous hard, horny warts, and similar growths were present on the forehead and nose, although none existed on the parts of the body covered by clothing. The forearm was amputated, but recurrence took place within a few months afterwards, the lymphatic vessels of the extremity being more obviously implicated than the glands. In addition to these two cases, Mr. Story had brought forward a case of epithelioma of the eyelid in a man who had been engaged at the same occupation. From inquiries made at the works, Dr. Ball learned that two others of the operatives had recently been somewhat similarly affected. One had an ulcerated wart on his nose, which had been destroyed by caustic, the cicatrix being still present, and another was stated to have had a large sore cut out of his face; but it was found impossible to trace this case, as none of his fellow-workmen knew what had become of him. The close resemblance between these cases and the soot cancer of Pott indicate that, like it, they owed their origin to long-continued irritation; in fact, it is quite possible that the active chemical agent is identical in both instances. As there are but seventeen men employed in this industry in Dublin, it would appear that the proportion of cases of epithelioma occurring amongst them is very considerable; the numbers are, however, much too small upon which to base statistics. There are but three principal products manufactured at the works in question. First, a light liquid, which is called "naphtha oil," comes over from the stills; then a heavier fluid, called "creasote oil," which the manager kindly informed Dr. Ball contains on an average about 8 per cent. of phenol, and pitch is the residue of the process. The "creasote oil" is the most irritating of these products, and, although, as stated, containing 8 per cent. of carbolic acid, the men wash their hands in it without hesitation. Dr. Ball had recently an opportunity of questioning a man who had been for a number of years engaged in one of the large carbolic acid manufactories in England. On this man's hands there were numerous warts, and he stated that such warts were not uncommon amongst the operatives, even those who only had to deal with the purest and most refined carbolic acid; but he had never known of any cases of cancer occurring amongst the workpeople.—The PRESIDENT observed that the last case showed that irritation of the skin was produced by the new industrial product mentioned. It would be worth inquiring into whether any difference was made by the use of wood or coal tar, and also whether the internal use of carbolic acid was dangerous. It was given in large quantities for many diseases; and they knew that the stomach was an organ which required very little provocation to generate epithelioma.—On the motion of Mr. STORY both specimens were sent to the Committee of Reference.

Professor BENNETT read a paper on Complete Dislocation of the Elbow Outwards.

The Section then adjourned.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

AT a meeting of this Society, held on March 26th,

Mr. GARRARD exhibited the Knee-joint of a patient whose thigh he had amputated the previous week. The cartilages were almost gone from extension of articular ostitis, the joint was disorganised, and the stump had healed by primary union. The disease was of twenty years' standing.

Mr. THORPE related particulars of an interesting case of Hermaphrodism.

Mr. S. MORTON related the case of a man, aged twenty-four, who had Pneumothorax on the left side, jumping from a dray having caused rupture of the air cells into the pleural cavity. He had been up to that moment in good health—no cough, no wasting, no history of phthisis. Next day the heart was found pushed over to the right side; its apex felt two inches below and one inch to the left of the right nipple. Amphoric resonance was general on the left side, with diaphragm pushed downwards. The patient suffered acute pain with dyspnœa for five days, after which he always said he felt well. In seven weeks the heart had returned to its normal position, after which he had general pleurisy on the same side, followed by effusion. After seventeen weeks he was quite well.

Dr. PORTER showed two cases of Enlarged Spleen. In one case the child, a year and ten months old, had a large hydrocephalic head, with wide fontanelles and all the symptoms of rickets. The spleen was of enormous size, occupying the greater part of the abdominal cavity, but placed obliquely so that the lower end extended to the right iliac region. In the other case the diagnosis was less obvious. The history was one of rapid enlargement since last Christmas, the spleen extending downwards as low as the level of the anterior superior iliac spine, and forwards as far as the middle line, the free anterior border and hilus being felt close to the umbilicus.

Mr. SNELL read a paper on the Implication of the Mastoid Process in Ear Disease. After remarking on the rarity of affection of the process without accompanying ear disease, he alluded to the frequency of discharges from the ear, and of the little heed that patients too frequently bestowed upon them in many cases. Attention was called to the value of incising the drum as a prevention of perforation in some cases. The importance in all cases of providing a free escape of pus by the Eustachian tube and meatus was urged, and the value of cleansing the ear with boracic acid lotion. Referring to the dangerous class of cases in which the interior of the mastoid suppurated and it became necessary to perforate the bone, the steps to be taken were mentioned, and allusion was made to the anatomical structure of the mastoid, and the frequency with which the process is composed of sclerosed, or at all events less pneumatic, tissue.

At a meeting of this Society on April 9th,

Mr. BARBER showed a Testicle which he had removed from a man aged fifty-two, who had been admitted into the infirmary suffering from phlebitis of the right femoral and saphena veins. On examination the right testicle was found to be enlarged and heavy, but quite painless. The man deemed it hardly worth mentioning as it had caused him no uneasiness for four years. Mr. Barber commented on the chronicity of the case, as microscopical examination showed the growth to be of a cancerous nature. The cord was only slightly thickened, and fluid was present in the tunica vaginalis.

Mr. ATKIN exhibited a large Vaginal Tumour for Mr. FAVELL. The woman from whom the tumour had been removed had had symptoms for twenty-four years, three years after her first and only confinement. On section the growth proved to be very succulent, and gangrenous changes were commencing; but on microscopical examination it was seen to be of fibro-cellular nature undergoing mucoid degeneration.

Mr. BALDWIN showed a case of Atheroma of the Heart, in which the right coronary artery was surrounded by an osseous plate, rendering the artery nearly impervious. The specimen was from a man, aged forty-seven, a heavy drinker when young, and who suffered from vague anginal pains over the chest, with a systolic bruit. Death occurred suddenly during an attack. Aortic valves thickened, and very atheromatous.

Dr. HARDWICK read a paper on Hæmoglobinuria, giving particulars of a case under his own care, and showing that a chill was the immediate cause of the occurrence of each attack in this instance, and afterwards remarked upon the accounts of the disease given by Drs. Elliotson, Prout, Watson, G. Harley, G. Johnson, Dickinson, Gull, Murchison, Pavy, Greenhow, Hassall, Habershon, and Stephen Mackenzie; and called attention to the cases of the latter as compared with his own case, which occurred in a lady of fifty-eight, in contradistinction to what is generally the case in adult males.—Dr. Dyson, Dr. Law, Mr. Browning, Mr. Baldwin, and the President joined in the discussion which followed.

At the annual meeting on April 30th the following officers were elected:—President: Mr. R. J. Pye-Smith. Vice-president: Mr. W. A. Garrard. Treasurer: Mr. G. S. Taylor. Secretary: Mr. Simeon Snell. Members to complete Committee: Dr. Law, Dr. Keeling, Dr. Dyson, Dr. Porter, Dr. Martin. Pathological Committee: Mr. C. Atkin, Dr. Gwynne, Dr. S. White, Mr. Baldwin.

On May 13th the annual dinner took place, and was well attended.

MIDLAND MEDICAL SOCIETY.

AN ordinary meeting of the above Society was held on April 23rd, the President, Mr. T. H. Bartleet, F.R.C.S., in the chair.

Mr. SPOFFORTH showed a case of Locomotor Ataxy with Joint Disease. The patient, a man aged forty-nine, had exhibited the usual symptoms of locomotor ataxy for two years before he met with an accident seven months ago. A reaping machine passed up the right leg, over the hip, across the back, and over the left shoulder. He went about for nearly a month after the accident, and was then laid up from swelling in the right knee, attended with great pain. About five weeks after the accident he was admitted into Kidderminster Infirmary. At the present time the right patella is much enlarged and dislocated outwards, and there is considerable effusion in the joint. The circumference of the right knee is eighteen inches, and of the left fourteen inches. The ends of the bones forming the joint are enlarged, and crackling is produced on movement. There is absence of the patellar reflexes, with swaying movements and the Argyll-Robertson pupil.

Mr. BENNETT MAY showed a boy, aged three years and a half, on whom he had successfully performed Thyrotomy for Papilloma of the Larynx. The thyroid cartilage being laid open by vertical incision for the purpose, a mass of soft vascular warty tumours was removed, some by scissors, and others by twisting, nitrate of silver being freely used to the surfaces. Tracheotomy had been performed by Mr. May, a fortnight previously, through an independent incision, and nearly three months elapsed before the tube could be finally discontinued, all attempts being attended by rapid closure of the outer wound and impending suffocation. The difficulty appeared to arise from the trachea becoming choked up with granulation tissue around and above the tube, though at one time relapse of fresh growths or stenosis from cicatricial webbing was feared. The boy had perfectly recovered, being quite free from dyspnœa or cough, and having a good voice. He had steadily improved up to the present time, five months after the operation.

Dr. SUCKLING showed a case of Ideal Paralysis. The patient, a boy aged sixteen, two years previously, after a trivial injury to the left knee, suffered from complete paralysis of the left lower leg. The paralysis supervened suddenly a few days after the injury, and had remained unchanged till within a few weeks ago. When Dr. Suckling saw him the left lower extremity was flaccid and completely paralysed. There was considerable atrophy of the muscles, but general and due to disuse. There were no qualitative electrical changes, and sensation was perfect. The reflexes were slightly excessive. The boy was not hysterical, but was emotional and nervous, of the neurotic type so well described lately by Dr. Allbutt. After being told that he would quickly recover, and after faradisation, he was able to move the limb, and at the present time can walk four miles, to and from the Queen's Hospital, without any support, only being a little awkward in his gait.

Mr. BENNETT MAY exhibited a collection of Calculi from recent operations, two removed by nephro-lithotomy, one by supra-pubic lithotomy, six by litholapaxy, and a number by perineal lithotomy, mostly lateral. Mr. May expressed himself a warm advocate of litholapaxy for the majority of adult patients. He found a No. 15 evacuating tube, if made of thin metal, large enough for fragments of moderate size. The débris of the largest of the six calculi shown weighed thirteen drachms, representing a stone an inch in length. It is of uric acid, and was taken from a gentleman aged sixty-three. After removal of the other calculi, recovery was complete and rapid. Mr. May also showed, on behalf of Mr. Crompton a splendid collection of Calculi, sixty in number, which the latter gentleman had formed during his life, and representing the majority of his operations. Many of the specimens were of great beauty and of large size. They were nearly all removed by lateral lithotomy, and a large proportion from adult and aged patients, with the exception of one which weighed six ounces and a half. The removal of only one of the number had been followed by a fatal result.

Mr. CROMPTON made the following observation on the subject of lithotomy:—"If I were asked what in my opinion was the chief cause of mortality after lithotomy, I should certainly say it was the want of certainty as to the real and free entrance of the knife into the bladder; sometimes, perhaps most frequently, from the knife not being pushed far enough along the grooved staff; sometimes from the staff having receded from, or not having been fairly and fully passed into, the bladder, and the forceps being attempted to be passed into such an unopened bladder, the consequences being too frequently fatal from urinary infiltration."

Reviews and Notices of Books.

The Elements of Pathology. By EDWARD RINDFLEISCH, M.D., Professor of Pathological Anatomy in the University of Würzburg. Translated from the First German Edition by W. H. MERCUR, M.D. Revised by JAMES TYSON, M.D. London: Henry Kimpton. 1885.

THE task of presenting a concise analytical summary of the widely extended field of modern pathological knowledge is no slight one. It could only be undertaken by one who has himself as thorough an acquaintance with the subject with which he has been so long identified as the author of this little book. Professor Rindfleisch has done good service in collating and generalising upon pathological facts and theories. For although in many particulars the incompleteness of knowledge does not at present warrant the formation of general deductions, yet it is good to have, if only for their suggestiveness, the well-considered conclusions at which a leading pathologist feels himself justified in arriving. The book is not, as its author remarks, intended as a text-book, but we venture to think that it may well form the basis of much instruction. The regret is that it is so brief; that where we should have liked detailed argument we have to be content with a few aphorisms. The tone is therefore necessarily dogmatic, for the reader is not in all cases led through the processes of reasoning which the writer has followed. Nevertheless, we have read the book with a pleasure which is sure to be felt by all who do the same. Some idea of the line of treatment pursued may be gathered by a reference to the chief sections into which the subject is divided. Under the general part is included in the first place the "symptoms" which characterise the local outbreak of disease—that is, inflammation and tumour formation, which practically include all the processes concerned in the initial lesions. Then follow sections on the anatomical extension of disease—namely, by metastasis and nervous irritation, with a discussion on fever and cachexia, as the leading "deuteropathic" symptoms. The physiological extension of disease, or "sympathetic" symptoms, comprises, under the head of Vegetative Disturbances, disorders of nutrition, circulation, blood formation, and blood purification, which include the major part of morbid derangements; and under that of Animal Disturbances the various disorders of the nervous system, each and all treated from the physiological standpoint. In the special part Professor Rindfleisch groups all diseases etiologically—the only true ultimate classification; and thus he arrives at five great divisions—viz., (1) traumatic diseases; (2) parasitic and infectious diseases; (3) diseases of evolution—i.e., of defective development and growth; (4) diseases due to overwork; and (5) diseases of involution. Of course, under traumatism is included every variety of injury and irritation, whether operating internally or externally, directly upon the tissues or indirectly through the nervous system.

The result of this mode of treatment, this comprehensive bird's-eye view of the whole domain of morbid processes and their manner of production, is a monograph which possesses the charm of originality combined with lucidity. We may think it premature and too theoretical, but it is at any rate fertile in suggestion; it may be often more dogmatic than is warrantable, but it is at least based on clear and well-defined principles; and, lastly, although we may fail to meet with many new facts, it presents us with the old in a novel light. Hence we welcome the book as one worthy of attention and thought, it being, as the author tells us in the introduction, which concisely sums up its whole purport, based on the attempt "to study the nature of disease in itself, and thereby to separate that which pertains to the cause of disease from that which is due to peculiarities of the diseased organism." The task of translation has been creditably performed.

Surgical Delusions and Follies. A Revision of the Address in Surgery for 1884 of the Medical Society of the State of Pennsylvania. By JOHN B. ROBERTS, A.M., M.D., Professor of Anatomy and Surgery in the Philadelphia Polyclinic. Philadelphia: P. Blakiston, Son, and Co. 1884.

THIS is a vigorous and interesting address, which is well worth reading. Dr. Roberts strongly advocates the use of ether in preference to chloroform, decries styptics for arrest of hæmorrhage, shows the exaggerated importance often attached to a slight or moderate loss of blood, advocates a much freer use of the trephine, early operation for strangulated hernia phlegmonous inflammation, and malignant tumours, proclaims the curability of acute traumatic tetanus, and draws attention to various other "delusions" and "follies." He has not attempted to say anything new, nor have we found anything taught in this address that is novel to any thoughtful surgeon who is abreast of the times. Superstitions and false notions live long, however, and it is well that attention should be prominently directed to them from time to time. Anyone who ventures to address his brethren upon their "delusions" and "follies" should, however, be beyond reproach; and we fear that some of the value of Dr. Roberts' excellent address will be lost from a certain looseness, we had almost said carelessness, of style. Thus, on page 29, while writing of the pathology of compression of the brain, he states, "I cannot believe it to be due to compression or displacement of the brain itself. It is more probable that compression symptoms are the results of encephalitis, due to injury from spicules of the inner table, or to the irritation of intracranial bleeding....... 'Compression of the brain,' as seen after injury, should be translated 'inflammation of the brain.'" This is a view quite at variance with every-day experience. The typical symptoms of "brain compression" are produced immediately upon the receipt of a depressed fracture of the skull and before inflammation can possibly have arisen; while undoubted encephalitis occurs without any of the special signs of "compression." On page 28 we read, "That simple puncture or aspiration of the heart itself is not accompanied by the expected risk to life has also been indicated, though I am not yet prepared to recommend its general adoption for trivial cardiac conditions." We should think not! Because asymmetry of limbs is "of common occurrence," Dr. Roberts would "place no reliance whatever upon measurements of the length of legs to determine the existence or the degree of shortening after fractures of the femur," and yet a little care will enable the surgeon to escape from the error existing asymmetry might lead him into. Long-established and, on the whole, most valuable usages are not to be set aside in this unreasonable fashion. One of the "follies" Dr. Roberts disclaims is the "sponge folly" for absorbing blood from wounds, because of the risk of introducing septic particles into the wound on the sponge; in place of sponges, towels or napkins are recommended. "Perfectly clean surgical sponges are the exception, but clean household towels are the rule." Dr. Roberts, we are sure, knows perfectly well that a so-called clean towel is loaded with septic dust, and is by no means surgically pure or fit to be introduced into a wound, and by the exercise of no uncommon care sponges can be made and kept quite free from dirt in either the general or surgical sense. On page 46 we read, "Adhesive plaster has little or no value in surgery, except for making extension and preventing motion in cases of fracture." This shows quite an inadequate appreciation of the use of well-adjusted plaster. It can accomplish what sutures never can —the uniform firm adaptation of surfaces without traction or tension upon any particular point; in the treatment of the wound after amputation of the breast, for example, it is most valuable, and there are many similar instances where a surgeon skilled in the use of strapping finds it a most useful adjunct to his treatment of a case. We can only refer to similar looseness in recommending full doses of the alkaloids in all cases in which they are given. Dr. Roberts' task, however, was a worthy one; his execution of it, on the whole, is good; but the expenditure of more pains in the preparation of this address would have rendered it more useful in putting an end to surgical "delusions" and "follies" than we dare hope it can be in its present form.

Health Lectures for the People. Illustrated. Fifth Series. Pp. 185. Edinburgh: Macniven and Wallace. 1885.

THIS is the fifth annual series of lectures delivered under the auspices of the Edinburgh Health Society. The lectures appear, as a rule, to be well calculated to further the objects of the Society, which are: "To promote by all means in its power attention to personal and domestic cleanliness, to comfort, self-denial, temperance, and the laws of health generally." Probably the most practically useful paper in this series is one on marketing and cookery, by teachers from the Edinburgh School of Cookery and Domestic Economy. It gives much useful information on the important subjects of how to market, and how to make the best use of the food when bought. These are points on which, unfortunately, sound advice is very much required, not only among the very poor, but among the well-to-do classes, and it is given clearly and intelligibly. It is followed by a lecture, by Mr. Falconer King, on "Food Adulteration," in which some of the more common forms in which sophistication is practised are brought to notice, and the injury to health and iniquitous robbery involved in it are pointed out. Mr. Falconer King appeals to the public to second, in their own interests, the efforts of the public analysts. "If people remain, as they are at present, profoundly apathetic, apparently, as to the purity of the food they consume, all the public analysts that ever were will be insufficient to stamp out the evil; but if these officials be assisted in the discharge of their duties as they ought to be by the public generally, so that transgressors may be detected and punished in such way that adulteration may cease to be profitable, then these worst of rogues will disappear, honest men will come in their place, and we shall soon have what everyone must admit is of the very greatest importance, so far as health and happiness are concerned—an abundant supply of really pure food." "The Bath: How and When to Use it," is also a lecture which, we trust, will be taken to heart by those to whom it is addressed. It brings out the unpleasant fact that public baths and wash-houses have not as yet been self-supporting institutions. In Bradford, Birmingham, Liverpool, and Glasgow they all show a deficit in the receipts. Edinburgh has not yet established public baths, but is about to do so. The Edinburgh Health Society has adopted the very useful plan of printing and distributing leaflets on the more important practical points connected with the improvement of the sanitary condition of the people, and thus bringing these matters to the notice of those for whose benefit they are intended, and who probably would not otherwise have an opportunity of knowing anything about them.

Brain. A Journal of Neurology. Part XXIX. April, 1885. London: Macmillan and Co.

THE opening article of this number is by Dr. Bristowe, and consists of a relation of some interesting cases of Intracranial Disease, with recovery from symptoms pointing to the presence of progressive organic brain affection. Two were cases strongly suggestive of tubercular meningitis, and the third one of symptoms of progressive disease in the neighbourhood of the fourth ventricle, possibly due to a syphilitic lesion, although there was no collateral evidence at all of syphilis. Dr. David Drummond describes the Spinal Lesion in Infantile Paralysis from a case fatal within six or seven hours of the onset; there were very marked inflammatory changes found in the anterior cornua. Dr. W. J. Dodds contributes the first part of a very exhaustive essay upon some Central Affections of Vision; and Dr. Allen Sturge a most elaborate study of the Nerve Phenomena in a case of Anæsthetic Leprosy, in which he suggests several points for further investigation. Dr. W. C. Bentley writes upon the Deep Reflexes in General Paralysis of the Insane, as indicative of implication of the spinal cord. A contribution to cerebral localisation is made in the record of a case of Brachial Monoplegia, due to a limited lesion of the internal capsule; the case is confirmatory of views recently enunciated in these columns by Mr. Victor Horsley. Other cases of interest are contributed by Dr. Sharkey, Mr. Walter Edmunds, and Dr. Suckling. The "critical digest" in this number deals with the Combination of Lateral and Posterior Sclerosis, and is supplied by Dr. Ormerod; and Dr. James Anderson contributes a report on Recent Advances in the Anatomy of the Nervous System.

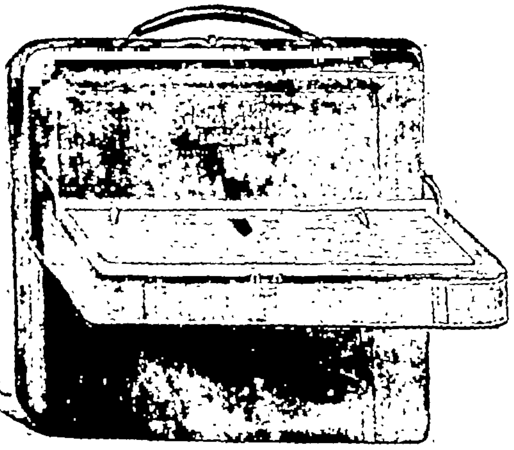
HOSPITAL FOR SICK CHILDREN, GLASGOW.—Dr. Finlayson has just completed a short course of demonstrations at this hospital of cases of Nervous Disease; there were illustrations of tumour of the brain and cerebellum, and a remarkable case of paralysis of the sixth and seventh nerves on *both* sides, with loss of sensibility of the palate, dribbling of saliva, affection of speech, &c., apparently due to a bulbar paralysis. These demonstrations were open to all medical students, and were arranged for the afternoon, as the ordinary visit hour did not seem very suitable for the summer arrangements of the students.

New Inventions.

A NEW OBSTETRIC BAG.

THE accompanying drawing represents a new obstetric bag which Messrs. Arnold and Sons, of West Smithfield, have kindly executed in accordance with my suggestions. Its general construction is as follows.

It is made of a light wooden case covered with morocco. It opens half-way down the centre, each upper half or wing falling outwards on a strong hinge, and having its fall limited to a right angle by two strong quadrants. To prevent the drawing from giving an impression to the contrary, I should mention that the wings will open outwards simultaneously, and not only one at a time as represented. The cavities of the wings are closed by strong leather lids, which are fastened with turn-buttons, and marked respectively A and B. Wing A contains long forceps, catheter, porcupine quill, hypodermic syringe in wooden case with ergotine, pilocarpine and morphia discs. Wing B contains perforator, craniotomy forceps, blunt hook, crotchet, and vectis. The main cavity of the bag, or well, is divided by a vertical partition into two compartments: the one being occupied by two cases of bottles (two four-ounce and four two-ounce); the other by a Higginson's syringe with long tube, a set of Barnes's bags, and a pocket-case in which are blunt and sharp bistouries, dressing forceps, needle-holder, needles, silk, and wire. This latter part of the well is covered in by a flat leather case containing an Aveling's transfusion apparatus, with special forceps and scalpel.



The advantages that this bag, in my opinion, possesses over others now before the profession are—1. Greater durability, owing to its general construction. 2. Avoidance of unnecessary exposure of instruments. On opening the bag no apparatus is visible. 3. Greater convenience, since the different sets of instruments are as far as possible packed together in separate cases or departments according to their functions. 4. Greater safety of the instruments themselves, because (*a*) the indiarubber is carefully separated from the steel; and (*b*), owing to the separate packing of the instruments, some of them need never be disturbed for years, thus escaping the daily dangers of injury to which they are usually exposed.

T. W. THOMPSON, M.R.C.S.,
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SANITATION IN CALCUTTA.

AN important outcome of the recent differences between the Lieutenant-Governor of Bengal and the Municipal Corporation of Calcutta has been the formation of a Health Society for Calcutta and its suburbs. The inquiries instituted by the corporation and by the committee appointed by Sir Rivers Thompson brought prominently to public notice the very unsatisfactory state of certain portions of the city and its suburbs, and the resulting high rate of mortality. While in some of the wards in which the water-supply is good and the conservancy efficient, the death-rate has been as low as 12 and 14 per 1000; in other parts, where these conditions have been neglected, it has been 35, and in the still more unfavourably circumstanced suburbs has ranged from 50 to 60, per 1000. With a view to instruct public opinion upon subjects connected with health, the causes of the high rates of sickness and mortality due to preventable disease, and the most efficient measures for their removal, the Public Health Society has been formed. It is proposed to effect this very desirable object by means of lectures on subjects connected with hygiene, by public meetings for the discussion of sanitary questions, by the publication of a journal of health in which the most recent information on all matters bearing upon the subject may be given, and by the formation of a library of works on sanitation. It is the earnest desire of the founders of the Society to bring together by means of it "a body of influential persons representing every class in the community, European and native, who may by sustained effort and combined action, both form and strengthen an intelligent public opinion, and give expression to that opinion in a manner calculated to command attention, and who may thus co-operate with and aid Government and the Municipality in initiating and carrying out sanitary improvements." But the Society propose to introduce a further very important practical measure. The Council "have made arrangements for enabling such householders as desire it to have their premises inspected and a report drawn up, by a capable and properly trained officer, on any sanitary improvements necessary to render them healthy and safe. A competent overseer has been engaged for this purpose, and the charge for inspection and report have been fixed so low as to bring this valuable safeguard within the reach of all classes." The first public meeting of the Society was held on Jan. 29th, in the Imperial Museum, when the chair was taken by Sir Rivers Thompson, the Lieutenant-Governor. A paper was read by Surgeon-Major R. Harvey, of the India Medical Service, on "The Plague, a History and a Lesson," in which he gave an interesting account of the disease from the earliest periods to the present times. He concluded by a warning of the possibility of the plague again finding its way to Calcutta, and of the "congenial soil" which it would there find in the filthiness and unwholesomeness of parts of the city and its suburbs. "Even if we had no fear of plague—and I do not think there is much,—we have our own pet pestilence, cholera, which, though not contagious like plague, is fostered by the same conditions; and we must remember that all zymotic diseases obey in various ways the same laws." We regret that Surgeon-Major Harvey did not take up the subject of the prevention of these existing causes of mortality rather than the history of bygone pestilences, but we have no doubt they will form the subject of future lectures. We look upon the formation of this Society and the manner in which it has begun its work with great satisfaction, and we trust that it may do good and efficient work in the promotion of such measures as will improve the health and diminish the death-rate not only of Calcutta and its suburbs, but of the population of the towns and villages throughout the Presidency.

BIRMINGHAM MEDICAL BENEVOLENT SOCIETY.—The sixty-third annual general meeting of this Society was held on May 29th. Mr. Sampson Gamgee, President, was in the chair, and there was a large attendance of members. The annual report stated that the work of the past year had been satisfactory in regard to the activity, prosperity, and usefulness of the Society. The invested funds at the end of 1884 amounted to £10,705, as compared with £10,515 at the end of the previous year. During the year fifteen annuitants had received grants, varying in annual value from £10 to £40. The number of benefit members is [illegible]. The financial statement showed that the total receipts during the year amounted to £[illegible] 8s. 11*d*. The following elections were made:—President: Mr. C. A. Newnham of Wolverhampton. President-elect: Dr. James Johnston of Birmingham. Vice-Presidents: Mr. Henry May and Mr. R. W. Smith. Drs. Foster and Wade of Birmingham, and Dr. Tibbitts of Warwick, were elected on the Directorate. Treasurers: Mr. Bartleet and Dr. Sawyer. Hon. Secretary: Dr. Thomas Savage. The members afterwards dined together at the Grand Hotel, under the chairmanship of Mr. Newnham.

THE LANCET.

LONDON: SATURDAY, JUNE 6, 1885.

SIR HENRY ACLAND, in his opening address at the recent meeting of the Medical Council, intimated that Inspectors appointed to visit the Final Examinations of the Universities have begun their labours, and would be supplied with all the information necessary for them to undertake their task. There ought to be a great deal of mutual respect between the universities and the Medical Council. The latter body contains eight representatives of universities. All the English universities but one have a separate representative in the Medical Council. The two Irish universities have each a representative; and the Scottish universities are represented, though only imperfectly—that is to say, the universities are grouped for the purpose of representation in the Medical Council; Edinburgh and Aberdeen alternately elect the representative, and Glasgow and St. Andrews. The Scottish universities might reasonably complain of this inequality of treatment; but the English and the Irish universities must admit that they have an amount of representation on the Medical Council fully equivalent to anything they do for the profession of medicine, or can reasonably claim from it or from a body regulating it. Not only is each of the universities of England, with one exception, represented by a separate member, but the President of the Medical Council is Sir HENRY ACLAND, who is identified conspicuously and worthily with the oldest of England's universities. Under these circumstances, in matters of medical education the universities might fairly be expected to defer greatly to the Medical Council, and the latter might fairly be expected to regard the medical regulations and the examinations of the universities with much attention and, if necessary, with a little candid criticism. We are not here defending the constant interference of the Council in regard to matters of general and preliminary education, which it has been trying for years to throw upon the universities and other bodies responsible for national education. We are referring to the strictly medical functions of the universities, and we maintain that in regard to these the Medical Council has its duties of supervision and even of criticism, which the universities ought to recognise and respect. That this is so is apparent from the Medical Act. The eighteenth clause of this Act provides that the Council may require of the bodies mentioned in Schedule A information as to the courses of study and other requisites for obtaining their qualifications. It also provides that members of the Council, or persons deputed by the Council, may attend the examinations of the bodies in Schedule A, making no distinction between universities and medical colleges or corporations. Clause 20 entitles the Council to make representations of defects in the requirements of the bodies to the Privy Council. Of course in a general sense, the right, and indeed the duty, of the Medical Council to take notice of the medical work of the universities is admitted. But it has not been thought to extend further than to see that the universities did not give their qualifications to persons not possessed of the requisite skill and knowledge for the efficient practice of their profession. This is surely not enough; and one of our principal purposes in referring to the commencing work of the Inspectors of the medical examinations of universities is to express the hope that we shall have from these gentlemen a critical and impartial estimate of the value of these examinations—not only as qualifying examinations, but as university examinations. The profession and the public look to universities to carry their examinations and tests decidedly higher than the standard of the mere pass examinations. It is the interest of the universities that this expectation of the public and the profession shall not be disappointed. Medical degrees are given very freely nowadays by certain universities. The University of Oxford even proposes to relieve itself of the duty of examining in Surgery by accepting the examinations for the diploma of the College of Surgeons. These things may be all right; but we want the Medical Council to assure us that they are all right, and that the higher titles of universities really mean higher examinations. The universities that are conscious of higher work will not object to have it testified by the inspectors of the Medical Council. Universities which give those "higher titles," of which Sir HENRY ACLAND lately spoke, which "are of no value at all"—if there are such universities—should be exposed. The sanctity of medical degrees must be recognised; but only so long as they represent what they profess to represent. We shall look for the record of the work of the inspectors of universities with much interest.

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THE Committee appointed by the Clinical Society about two years ago for the investigation of the results of Dr. MORTON'S Treatment of Spina Bifida by Injection of a Solution of Iodine in Glycerine, has at last made its report. Owing to its length, it has been read and published only in abstract, and we shall have to wait till the autumn for the full text, which will appear in the next volume of the Society's Transactions. The Committee wisely took a broad view of their task, and set themselves first of all to inquire into the pathological conditions grouped under the term "spina bifida." They have been able to divide them into three classes—meningoceles, myelo-meningoceles, and syringo-meningoceles. Judging from specimens preserved in the museums of London, Glasgow, and Cambridge, myelo-meningocele is the most common condition, and syringo-meningocele the rarest. But in view of the known great frequency of this deformity, and the comparatively small number of specimens in museums, it is open to question how far these collections fairly represent the actual proportionate frequency of these three varieties.

In the pathology of the affection the Committee have been able to settle definitely one or two points which are of considerable importance. First, they have proved by microscopical preparations that the vertical fissure does not involve the spinal cord, for the central canal of the cord can be demonstrated intact in the expanded nervous tissue. Secondly, they have shown that in myelo-meningoceles the spinal cord is flattened out and blended with the sac of the tumour in its median vertical portion, and that the nerves crossing the cavity of the tumour come off from the expanded cord in the usual way, and are not distributed to the sac, as has been erroneously stated. Thirdly, they have found that there is an absence of mesoblastic tissue in the walls of the tumours, in some cases partial, in others entire, and they regard the deformity as due to a want of development of this embryonic layer.

On the clinical side, the inquiry has extended beyond the investigation of cases submitted to Dr. MORTON'S treatment. A large number of cases of all kinds have been collected and tabulated, and these afford means for comparing the results of different kinds of treatment. The most surprising outcome of this part of the inquiry is the success that has often attended severe operations such as ligature or excision of the tumour, measures which have been adopted without an adequate estimate of the nature of the deformity and of the risk of the procedure. The Committee believe that the published records of these measures may be misleading, owing to the cases of failure not being recorded. To some extent no doubt this is true, but it is of course open to question to what extent this applies to such operations as excision more than to injection into the sac. But a still more important consideration is that in the cases thus treated paralysis has not been caused, as would be the result were the spinal cord removed, and in many cases it is expressly stated that the cord or nerves were not in the sac. This not only proves that these cases were examples of meningocele, but their number shows that meningocele is more common than museum specimens indicate. It is another demonstration of the fact that pathology must be studied in a wider field than our existing museums afford. The Committee, however, lay stress upon the fact that it is impossible in any given case to predicate the freedom of a tumour from spinal cord and nerves; in other words, they say that it is impossible to diagnose meningocele from myelo-meningocele. In many cases the surgeon may be certain the cord is in the sac; in other cases, where the tumour is pedunculated, covered by a thick healthy skin, and there are no concomitant nervous phenomena, it may be suspected that the cord is not in the sac, but it is impossible to be sure of this. If this statement be accepted, it follows of course that the surgeon must always act as if the cord were in the sac, as if he were dealing with a myelo-meningocele; and an instant's consideration will show that for this reason ligature or excision of the tumour, or indeed any operation which threatens the integrity of the median vertical portion of the tumour, must be entirely abandoned, and this in spite of the success that has often followed these measures. No doubt those who have practised excision successfully will be inclined to contest this point, and to doubt the impossibility of diagnosing meningocele; in view of the careful investigation and report of this Committee however, we doubt whether such operations can be justified. Turning now to the other side of this part of the report, we learn that the Committee have found that Dr. MORTON'S treatment has been attended with a large measure of success, and it is recommended as the best treatment at present known for this condition. The Committee advise that a careful selection of cases suitable for it should be made, and they urge that it is foolish to practise it where from the presence of grave marasmus or a marked condition of hydrocephalus, even the cure of the spina bifida would not offer a chance of materially benefiting the patient. The treatment is so simple, and, when properly conducted, so free from dangers of its own, that there is a risk of its adoption in cases quite unsuitable for any kind of treatment, with a view, perhaps, of giving the child a chance. Such a course, however, can only bring a valuable measure into unmerited ill repute, and it is to be distinctly deprecated. As to the mode of action of the iodo-glycerine, the abstract report furnishes no information; it contains, however, a clause to the effect that, with one exception, there is no evidence of the cure of spina bifida by this method ever having caused paralysis, and a doubt is expressed whether the subsequent occurrence of hydrocephalus can be fairly attributed to the previous cure of the spinal deformity. Congenital deformities are all extremely important, and no aid that surgery can afford is more welcomed than in their removal or cure. Spina bifida affords no exception; it is common, and is generally attended with early death, and up to the present its treatment has been to a large degree empirical and unsatisfactory. We anxiously await the publication of the full report of this Committee of the Clinical Society, because we think the abstract of it justifies the hope that it does much both to clear up doubts as to the nature of the deformity, and to put its treatment upon a more satisfactory, because scientific, basis.

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WHATEVER opinions may be held as to the value of the Report of the Royal Commission on the Housing of the Working Classes, there is no doubt that the printed minutes of evidence will be read by all with the deepest feelings of interest. There has been no lack of effort to obtain information on every point bearing upon the subject of house accommodation for the poor, and upon the relation of this accommodation to their social and moral welfare. Philanthropists, statesmen, clergymen, lawyers, architects, and officers to local authorities and building societies, have been examined, and each has added to the general stock of information which the issue of the volume now makes available for public use. When witnesses have been so numerous, it is not surprising to find that opinions widely apart have been expressed. Thus we find, on the one hand, a demand for fuller legal powers and better rights of inspection; and on the other, the strongest objection taken to State interference of any kind whatever. Again, while some witnesses demand the use of public moneys for the erection of suitable dwellings, others protest against this course as demoralising and dangerous. It is, however, easy to reconcile these apparently different opinions when the experience of the individual witnesses is taken into account. We can sympathise with those landlords upon whose tenants the sanitary inspector may be an unnecessary intruder, but we cannot yield to the opinion that he is not the less urgently required when house owners neglect their duty to their tenants and fail to keep dwelling-houses in habitable condition. The evidence, indeed, points more clearly than the report to the one conclusion that the enforcement of sanitary law and the efforts of the philanthropist must go hand in hand if the condition of the working classes in our large towns is to be benefited. Perhaps no evidence will be read with greater interest than that of Lord SHAFTESBURY, who, speaking with the experience of two generations, is able to bear witness to the enormous improvement which has taken place during this period. Lord SHAFTESBURY has seen a far worse condition of things than that which is now the cause of so much condemnation, and we are at liberty to assume that this has resulted in no small degree from the operation of the Sanitary Acts. The chief problem to be solved, however, is whether suitable dwelling-house accommodation can be provided in sufficient quantity and at a rental which will not unduly tax the weekly earnings of working people, and the evidence of those who have been engaged in making such provision as they could, forms one of the most valuable portions of the volume. London is already learning how this may be done, and it is now being found that it is possible to erect, as a mere pecuniary speculation, tenemented houses of the model kind for artisans; whereas, a few years ago it was thought that such dwellings could only exist as the result of individual benevolence. The formation of companies is doing much, not only in providing dwellings, but in setting an example which builders are slowly following. A few years ago it would have been thought very difficult to find tenants for buildings of the model type, but the rapidity with which those that have been erected have been occupied has proved the contrary. At the present time it is urged that the labouring classes would be unwilling to live under any other conditions than those to which they have been accustomed; but this, too, will be found to be fallacious as soon as suitable accommodation of this class shall have been provided. It will not be long before such buildings have been erected by a company which has been formed for this purpose, and as soon as its success has been proved, it may be anticipated that builders and others will again follow the example that has been set them. But the very moment the State steps in, and at the cost of the community erects dwellings for a class, individual effort will be retarded and great injury done.

Much evidence has been taken on the subject of one-room tenements. It cannot be denied that single rooms will be required by some, and there can be no objection to their use on the score of morality so long as due regard is had for the age and sex of the occupants. The action of local authorities in providing isolation hospitals, baths, and washhouses, as well as mortuary accommodation, is intimately associated with this question. Hope is raised by a perusal of the evidence that such rooms may be supplied at a cost which the labourer will be able to bear. The problem is not altogether solved, but certainly more nearly approaches solution than in past times. A continuance of the improvement in the dwellings of the working classes cannot be accomplished by any one person or any one body, but will be the result of all the forces which have been steadily working for years, and which will doubtless gather fresh strength as the result of the recent inquiry.

AN active correspondence in the Birmingham *Daily Post* amply proves that the management of the local Medical School is just now exposed to much adverse criticism. The evidence at hand is not sufficient to form the basis of an impartial judgment on the questions raised; but it establishes a strong *primâ facie* case for inquiry into the causes of the existing dissatisfaction, and the best manner of remedying it. It is only just to recall that the traditions of the Birmingham Medical School are most honourable and encouraging. Even before the days when Sir WILLIAM BOWMAN was a dresser in the Birmingham General Hospital, under Mr. JOSEPH HODGSON, the local physicians and surgeons had done excellent work. From their ranks have since sprung leaders in almost all departments of medicine and surgery. When the medical examining bodies published their statistical results, the Birmingham School took an honourable place, and held it. The present class of students is a numerous, enthusiastic, and well-conducted body of gentlemen, fully entitled to all that can be done for their higher education. But, unfortunately, the School is so split up into sections that it is not easy to determine who is responsible for any deficiencies that may exist, or to whom to appeal to remedy them. The General and Queen's Hospitals, forming jointly one of the richest clinical fields in the kingdom, are amalgamated for purposes of clinical instruction, their acting honorary officers constituting a clinical board, which appropriates the whole of the clinical fees for its members, and is virtually autocratic. The lectures on botany, chemistry, physics and physiology are given at the Mason's Science College. This is a new institution of very high promise, just now presided over by a distinguished physician, who has munificently presented it with a library of twelve thousand volumes, but not otherwise under the influence of the medical profession. At the Queen's College, which is the parent medical school, the other lectures are given; and there the professors are practically the governing body. It has been their custom, for some years, to reconcile rival claims by appointing two professors to several of the chairs; while some subjects, notably pathology and a few of the leading specialties, appear to have received scant attention. It can scarcely be doubted, that if the Councils of the Queen's and Mason's Colleges and the Clinical Board of the amalgamated hospitals, recognising the solidarity of their own and the students' interests, appointed a representative committee of inquiry, the first step would be taken towards solving the existing difficulties. The authorities of the town and the governors of its hospitals, the medical practitioners and students, have obviously a strong and common interest in the honour and prosperity of the Birmingham Medical School. The materials for organising it are at heir doors. Vested and personal interests may fairly claim equitable consideration; but, if they block the way, they will have to yield to the common and major good.

WE yield to none in sympathy with our brethren of the Poor-law medical service, or in desire to assert their right to a measure of justice which has for many years past been denied to them. At the same time it is necessary to be strictly accurate and politic in the statement of their grievances. We sometimes fear that the avowed champions of their cause are not so careful in these respects as it were well they should be. For example, in reference to the burning question of medical relief and disqualification, which has just now been fanned into a flame by factitious processes, it is abundantly evident that there is much to be said on both sides of an issue hastily raised, and made by *ad captandum* processes of reasoning to appear in a light wholly unnatural to it. The facts are simply these. All are agreed that medical officers appointed for the relief of the poor ought not to be expected to attend persons who are not absolutely indigent. It is a scandal that the most over-worked and worst-paid class of public officials should be taxed in time and strength for the convenience of men who, with their wives and families, are able to earn a fair wage; and it is only just that those who take advantage of the public rates by availing themselves of the services of the Poor-law medical officer should in virtue of a recourse to such relief be deemed to be pauperised, and consequently lose their citizen privilege of the franchise. If some such check as this were not imposed on the unthrifty classes, there would be an indiscriminate abuse of the gratuitous medical advice and assistance provided at the public expense. There can be no sort of question on the score of right and expediency thus far. The point at which difficulty arises is that at which it becomes necessary to define "medical relief" in such a way that, while abuses are prevented, no obstruction shall be thrown in the way of prompt assistance in all cases of severe illness, particularly of the class which it is especially important to the community at large to stamp out. We must not encourage concealment of disease or delay in seeking assistance on the score of a wish to retain electoral privileges. It ought not to be forgotten that the extension of the household franchise to the counties involves the inclusion of an immense class of agricultural labourers in the number of those who vote. These persons are barely able to keep body and soul together on the pittance they earn. Unless an entirely new and well organised system of provident societies can be established, there is not the slightest chance of the majority of these electors avoiding the parish doctor. They form the bulk of his poor patients now; they must do so in the future. If their number can be reduced by the fear of losing the privilege about to be conferred on them, we shall be heartily glad; but it must be distinctly understood that the question is not one of keeping a new class away from the doors of the medical officer, but of getting rid of some at least of his present *clientèle*. There will be no increase of the heavy burden of work that presses on the district medical officer; the only question is whether by any manœuvre his toil can be lessened. This seems to be forgotten or put out of sight by too many of the disputants in this controversy. Moreover, as the Poor-law authority is the sanitary authority in many rural districts, unless the hospitals for infectious diseases are put on a separate footing, the labourer will be disfranchised for allowing his child to be isolated. This must be avoided. The shortest way out of the difficulty would probably be to pass a short Act of Parliament defining "medical relief" on a fair and equitable basis. With this arrangement everybody would be satisfied, and both the public and the profession would be content.

THE death is announced of Dr. W. L. Crowther, of Hobart. He became a Member of the Royal College of Surgeons of England in 1841, and was elected a Fellow in 1874. He was one of the few recipients of the Gold Medal of the College, given for special services to the Museum. For many years he was Surgeon to the Hobart Hospital, but had lately devoted himself chiefly to politics. He was sixty-eight years of age, and the cause of death was peritonitis, from which he had been suffering for about a fortnight.

Annotations.

"Ne quid nimis."

THE GORDON MEMORIAL.

THE scheme originally proposed by Sir E. Inglefield, and provisionally accepted by H.R.H. the Prince of Wales and the members of the Gordon Memorial Committee, to found and endow a hospital at Port Said, with the object of perpetuating the memory of the "dauntless Christian hero of Khartoum," has been given up in consequence of the unfavourable reports which have been received concerning it. Two Royal Engineer officers and an officer of the medical staff reported that the site proposed for the hospital at Port Said was in every respect unsuitable, and that its sanitary conditions were as bad as could possibly be imagined. The Committee, after a careful consideration of these reports, resolved that the proposal to erect a great hospital at Port Said as a national memorial to General Gordon must be abandoned. They do not appear to have been prepared to recommend anything else instead of their abandoned scheme but, on the motion of Cardinal Manning, seconded by Lord Napier of Magdala, it was resolved: "That the members of this Committee be invited to submit in writing any suggestions they may desire to make for the appropriation of the fund for the consideration of the subcommittee, together with the applications and suggestions already in the hands of the secretary, and that the subcommittee be requested to bring up their recommendations on the subject to this committee at their next meeting." The task thus devolved on the subcommittee is an important but difficult one, for we have no doubt they will have plenty of suggestions, possible and impossible. One advantage of the delay will be that time will be afforded to ascertain how far any scheme which may appear advisable to them is likely to be capable of practical application. Of the many proposals which have already been made, and will doubtless be brought before the subcommittee, there is none which strikes us as more in accordance with Gordon's character than that of an institution for the redemption of some of our waifs and strays by affording them a chance of being trained to means of earning an honest livelihood. The success which has attended some of those institutions which already exist for the homeless and destitute is certainly encouraging, but they are far too few in comparison with the numbers for whom they are required. The interest which Gordon took in this class may be accepted as an indication of the work which he would have been anxious to promote and which therefore would form an appropriate memorial of him. Some steps have been already taken in this direction, independently of the committee, with a view to establish what it is proposed to call the Gordon Boys' Camp. The amount at the disposal of the committee appears to be only about £17,000, but if some such scheme were taken up by the Prince of Wales and the committee of the fund, and were brought before the public in a practical and business-like manner, we have no doubt that money would be forthcoming to carry it out in a manner in every way worthy of the great and good man whose name it is proposed in this manner to perpetuate.

DEATHS FROM CHLOROFORM.

AN inquest was held at Guy's Hospital on May 27th, on the body of a man, aged twenty-four, who died from the effects of chloroform, which was being administered for the purpose of aiding in the reduction of a dislocated humerus. The post-mortem examination revealed nothing more than "slight disease of the large vessels of the heart." In fact, the medical evidence was to the effect that there was no organic disease sufficient to account for death. There seems no reason to doubt that the deceased succumbed to the toxic action of chloroform, promoted, it may be, by a certain amount of shock incidental to the operation. On the 31st ult. Dr. Danford Thomas conducted an inquiry into the circumstances connected with the death of Rebecca Townsend, aged fifty-three, which happened at the Middlesex Hospital whilst the deceased was being anæsthetised, with a view to abdominal section. The heart was examined previously, and found to be "quite sound," but the autopsy revealed "enlargement of the heart and liver, and disease of the other organs." Such cases illustrate well the dangers to be apprehended from chloroform narcosis. In the former of the two it may be said, however, that there was nothing to lead to the supposition that the danger would not in all probability be escaped, for the patient was young and free from visceral complications. The latter case was instructive, inasmuch as it showed that, in spite of careful examination immediately before the induction of anæsthesia, grave structural alteration of the cardiac tissue may pass undetected. It may be fairly assumed that when a patient has reached the age of fifty years the integrity of the vascular system is more or less undermined, and experience teaches that the extent of the lesion may be out of all proportion to the physical signs. Age, then, is always an important factor in estimating the propriety of chloroformisation. The rule generally laid down is that if the operation is severe and likely to be followed by dangerous shock, it is proper to give an anæsthetic if the operation is justifiable. The latter question fortunately does not come within the province of a coroner's jury, who could never be allowed to discuss and adjudicate upon a purely technical matter. For that reason it behoves every surgeon to weigh carefully the evidence in favour of and against the patient being anæsthetised, and also to select the anæsthetic least dangerous to life, which is sufficient for the purpose of his operative procedure. It is a noteworthy fact that death from chloroform has occurred with somewhat unusual frequency when the drug has been inhaled prior to the reduction of a dislocation. There being as a rule no external wound complicating this accident, one is apt to under-estimate the amount of shock produced by the violence, which must really be considerable, and continued so long as the dislocated bone keeps the trunk nerves on the stretch. Again, there is always an uncertain quantity in the "personal equation," which experience alone can give a clue to; and unfortunately this is not always available. In the former case, related above, there is sufficient evidence to show that the "personal equation" was highly developed; or, in other words, that the deceased was peculiarly susceptible to the action of the poison on the cardiac nervo-muscular dynamism.

VACCINATION AND SMALL-POX.

IT is not a little remarkable that while anti-vaccinationists are constantly accusing the supporters of vaccination of disingenuousness in dealing with vaccination statistics, it is scarcely possible to find any contribution from the opponents of vaccination that is not obviously open to similar charges. Fallacious statements are made in the interest of anti-vaccination which, even if met by the most unanswerable rejoinders, are never withdrawn or even modified. Mr. Charles H. Hopwood, Q.C., who is at any rate a consistent opponent of vaccination, recently published a letter in the *Standard* which contained, among other assertions, the following paragraph:—"May I add that the figures from the Registrar-General's returns show that, taking all ages above two years, the death-rate of the vaccinated is 13·76, and of the unvaccinated 13·15?" Here is a statement made by an M.P., on the asserted authority of the Registrar-General's returns, showing that the mortality of the unvaccinated from small-pox is rather less than that of the vaccinated! This statement, with its authority, will doubtless be printed and disseminated widely by the agents of the Anti-vaccination Society. It is needless in these columns to dwell upon the fact that such a statement is not only false in substance, but that it has no shadow of support in any returns of the Registrar-General, which tell a very different tale. A correspondent in the *Standard* has since pointed out that the Registrar-General's returns show that the mortality among the unvaccinated in England and Wales from small-pox is twenty-nine times greater than that among the vaccinated. Another correspondent points out that the statement quoted by Mr. Hopwood, and said to be based upon the Registrar-General's returns, was taken from the translation of a passage from a German report, purporting to be based upon the experiences derived from a population of 60,000 officials and workmen employed on the Imperial Austrian State Railways. The translation from the German was by Mr. Hume-Rothery, the late President of the Anti-vaccination Society. Mr. Hopwood, it is true, has since acknowledged his error in giving the Registrar-General's returns as his authority for the statement that the mortality from small-pox is greater among the unvaccinated than among the vaccinated. He does not, however, even allude to the fact that the returns of the Registrar-General give results diametrically at variance with those quoted by him on the authority (as he says, preferred by him) of an unofficial German report containing the observations of one observer, who purports to have discovered that vaccinated persons suffer more severely than the unvaccinated, and revaccinated persons more than the vaccinated. The Registrar-General's figures, on the other hand, are based upon the combined observations of more than twenty thousand observers, and are thus comparatively free from the defect of possible individual partiality. Mr. Hopwood's claim of silent admission of other statements in his letter, many of which are mere assertions, is not worth discussing.

PHYSIOLOGY OF LACTIC ACID, CREATINE, UREA AND GLUCOSE.

IDIOPATHIC diseases probably owe their obscure nature largely to our want of knowledge of the intimate chemistry of the body. A complete knowledge of physiological chemistry would imply a perfect understanding of life in so far as we are capable of understanding anything. Hence the importance of all studies tending to elucidate this subject. In a pamphlet on the origin and formation of lactic acid, creatine, urea, and glucose in muscular tissue, Dr. Latham has attempted in an ingenious manner to throw some light on processes of metabolism. He attempts to show that albumen is a compound of cyan-alcohols united to a benzine nucleus—the cyan-alcohols are supposed by him to be derived from the various aldehydes, glycols, and ketones; that lactic acid may be obtained in two ways, either from $C_2H_4\left\{\begin{matrix}OH\\ON\end{matrix}\right.$ or from changes and condensation in $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ from which latter molecule creatine and creatinine may also be derived; that urea may be obtained from one series of cyan-alcohols with the production of a cyan-alcohol higher in the series. We have not the space to follow Dr. Latham through the various formulæ by which he is led to the above conclusions. Whilst we feel strongly that his attempts are deserving of careful consideration, they can, however, only be regarded as tentative. A few years ago Dr. Latham showed how, by a combination of cyan-alcohols, bodies might be obtained having the same composition as that given by Schutzenberger for albumen. The chief objection to the formula which he then suggested was "that it consists of a large number of molecules in *molecular*, as distinguished from *atomic*, combination; and, on the whole, organic molecules seem to have extremely little tendency to enter into this kind of combination." Dr. Latham now submits a formula which, by combining the cyan-alcohols with a benzine nucleus, gives rise to a body having the same composition as albumen.

THE GRESHAM COLLEGE: AN ARREST OF DEVELOPMENT.

A LETTER published in a daily *contemporary* on the Gresham Lectures has directed timely attention to a public trust, the present usefulness of which its firmest supporters will hardly venture to extol. Gresham College was designed by its enlightened founder to be an "epitome of a university in London." It is not perhaps his fault that it has remained an epitome of the barest kind. He laid the foundation of a university by forming and endowing a nucleus or nuclei of instruction in each of the recognised departments of learning, and he left it to posterity to develop the structure. Had the bequest been made in our own time, it would probably have shared in the general advance in organisation which has aided the efforts of other teaching bodies. As events have proved, the Gresham lectureships, locked up and isolated by restrictions, and devoid of scholastic method, have been of little service either in training pupils or encouraging research. Like mummy wheat, they contain the germs of successful growth, but they have not sprung up for want of the needed contact with soil and moisture. Of late years various plans have been suggested by which their dormant life might be awakened to activity. Mr. Goschen's suggestion, that their endowments should be transferred to the University Extension Society, is one of these. Metropolitan teaching bodies have in their turn been proposed as the natural heirs of the same property. Should any one of these amendments be carried out, it is evident that alterations will have to be made in executing the expressed intentions of the founder. No injurious change need, we think, be introduced; and the original idea would be consistently maintained if the "epitome" of Sir Thomas Gresham could be developed into an efficient teaching university for the whole of London. The gratis attendance provided for by the terms of the bequest might be modified, in the case of the lectures specially mentioned in it, by the imposition of a nominal fee sufficient to ensure that only *bonâ-fide* students should attend them. The methods of instruction could be assimilated to those of other universities. Understanding the public spirit of our time and country and the zeal for education of the merchant companies, we do not despair that they will find means of moulding to full shape and use the too long embryonic form of this large and wise intention.

BELLADONNA POISONING.

ON Friday, May 29th, six boys, aged from six to nine years, were taken to St. Thomas's Hospital suffering from symptoms of poisoning by belladonna. Between 12 and 1 o'clock they were playing together with others, when a boy about fourteen accosted them and asked if they would like some "Spanish"; on their replying in the affirmative, he gave them some black fluid out of a bottle. All those who took any of it became ill, and when seen by Mr. Robinson, the house-physician, two hours later, presented very similar symptoms. Two were able to return home, their symptoms being of slight character; but four were admitted. One aged nine, who suffered most, presented a flushed excited appearance, his eyes being bright and pupils widely dilated; he refused to take anything; there appeared to be some loss of power in the legs: he had attacks of rigidity of the limbs, between which he tossed about. In the evening he complained of dry throat, double vision, had hallucinations, and frequent micturition. He was delirious up to 4 o'clock the next morning, when there was still dryness of the throat, dilatation of the pupils, and an erythematous rash on the arms and legs. He gradually recovered, without intestinal symptoms. Each boy was given an emetic of sulphate of zinc, after the action of which the stomach was washed out with warm water. A quarter of a grain of morphia was injected subcutaneously, and the sleepy condition induced was counteracted by forced exercise. In the two most severe cases coffee was given per rectum. It was not possible to ascertain the exact character of the fluid taken, but a piece of broken bottle was found which was stated to have been part of that from which the fluid had been given, and to this some sticky sweet-smelling material was adhering. It was not, however, taken to the hospital for examination. The boy who "treated" the others was not again seen, and there was no clue as to the possession of the poison; but from the frequency with which belladonna is prescribed for inflammatory conditions in our out-patient departments, it is not improbable that it was obtained from one of the large hospitals.

SMALL-POX AT THE EAST-END.

AT the meeting of the West Ham Board of Guardians on the 28th ult., the report by Dr. Moir, medical officer of the Small-pox Hospital, on the second series of 1000 cases of small-pox treated in the Board's Hospital at Plaistow was read. His previous report was made in February, 1882. The epidemic had been more severe and protracted than that of 1881, but the house-to-house visitation instituted by the guardians had already been of the greatest service in increasing the number of vaccinations and revaccinations, and would, in his opinion, prevent the spread of the disease in the future to such an alarming extent as it had assumed in the past through the neglect of those simple and efficient precautions. In all the 2112 cases treated in the hospital, no death from small-pox had occurred after revaccination. At the same meeting, Dr. Kennedy submitted a report on the house-to-house visitation which had been carried on under his supervision in the parishes of West Ham, East Ham, and Little Ilford. The visitation extended from March 30th until May 14th, and during that time 25,257 houses were visited, and the statistics of 142,220 persons were obtained. Of the above persons, 140,186 were found to have been vaccinated, or 98·6 per cent. of the whole; 25,102, or 17·6 per cent., were found to have been revaccinated; 2034, or 1·4 per cent., were found to be unvaccinated. Out of 140,186 who had been vaccinated, 6232, or 4·4 per cent., had had small-pox at some time during their lifetime; and out of 25,102 who had been revaccinated, only 25, or ·10 per cent., had had small-pox at some time during their lifetime.

GASTRIC DILATATION.

A CASE of excessive dilatation of the stomach is mentioned in the *Vrach*, which occurred in the clinic of Professor Koshlakov of St. Petersburg. The patient was a peasant aged forty, and had been ill for three years. It was found that six litres of water could be introduced into the stomach without occasioning the man any inconvenience. The same journal records the case, by L. Scheffer, of a peasant, aged forty-nine, with intestinal obstruction, who, after the stomach had been twice washed out, passed a stool containing ascarides. Two grains of santonin were then given, with jalap, and about twenty round worms, which had been the cause of the obstruction, were passed.

OBLITERATION OF ONE LUNG, WITH DISPLACEMENT OF THE HEART.

At the closing meeting of the Islington Medical Society, on the 26th ult., Dr. Glover gave the particulars and showed the specimens of two very striking lesions in the case of a man aged sixty-three, whom he had known for several years as a dispensary patient and otherwise. The most noticeable peculiarity was the complete displacement of the heart. It occupied the right side, and beat between the fourth and fifth ribs. This fact had been observed thirty-five years ago by Mr. Jackson, one of the oldest members of the Society, and the patient had been examined by many physicians, amongst others by Dr. Austin Flint, who came to the conclusion that there was no transposition of organs—a conclusion verified by the post-mortem. But the autopsy revealed another lesion, which was as remarkable as the malposition of the heart. This was the almost complete absence of the right lung. It had to be long sought for ere it could be found, and was then discovered as a very hard shrivelled substance, in shape something like a sausage. On being cut into, it was found to consist almost entirely of thickened pleura, the pleura being at points half an inch thick. The lung substance was nearly destroyed, not with intersecting bands of fibrous tissue, but by this envelope of thick pleura. The left lung was correspondingly large. No history of pleurisy could be traced in the patient's life, and no history of consumption in that of his family. He had always been weak and slight. His mother always had noticed "a beating on the wrong side." He used to have severe bleedings at the nose. His chief troubles had been cough and rheumatism. He died in the Islington workhouse of broncho-pneumonia. It is common to say that a person has lost a lung, but here the statement was a literal expression of the fact, though the patient contrived to live without it, and with his heart on the wrong side, for sixty-three years.

DEATH CERTIFICATES.

Mr. J. C. Malcolm, Borough Coroner of Chapel Allerton, during the holding of an inquest recently, is reported to have delivered himself as follows: "It was not an uncommon thing in Leeds for some medical men to certify that deaths had arisen from natural causes where they had actually resulted from violence or accident." This may or may not be the case; but before we can join the coroner in his sweeping denunciation, we should like to know whether he believes that the certificates of the Leeds doctors are given with the knowledge that they are false, or even carelessly, without their taking the trouble to ascertain the truth of the facts "certified." The whole question turns on this. We yield to no one in advocating the advisability and insisting on the necessity of all death certificates being rendered in unambiguous language and with the strictest accuracy. Nothing is more detrimental to the cause of pathology and scientific medicine than that the proximate causes of death should be treated lightly, as though they were of no practical use.

THE TUBERCLE BACILLUS.

Dr. Fütterer gives the result of some examinations he has made of tuberculous organs with respect to the distribution of bacilli in them (Virchow's *Archiv*, Bd. 100, Hft. 2). In caseous broncho-pneumonia, several colonies of bacilli were met with in each of 200 specimens examined, and disposed mostly in an arborescent manner like the smallest bronchial divisions. The colonies covered areas as large as from three to five alveoli, and were most abundant where softening was in progress. In miliary tuberculosis with desquamative pneumonia, bacilli were found in thirteen out of sixty sections examined, in masses within the tubercles, and in one specimen within a thrombus in an artery. In miliary tubercle of the liver, they occurred around vessels, but not within them. In tubercle of the kidney, bacilli were found around and within bloodvessels, in a glomerulus, and once within fibrinous exudation in a convoluted tube. In no instance did he see bacilli within giant cells. He believes that the bacillus stains variously according to its stage of development, which may account for its being overlooked occasionally. Its preponderance in softening masses indicates that it is the cause of the softening process, which he compares with putrefaction, and this also explains the abundance of bacilli to be detected in the sputum.

THE PARKES MUSEUM.

The Council of the Museum have determined to hold during the summer months, when lectures are impracticable and unattractive, a series of annual exhibitions devoted to some limited subject having reference to hygiene. The first of these exhibitions is to be opened on Monday next, when will be displayed a complete series of the inventions of Mr. Fletcher of Warrington, for the domestic use of gas. Many of Mr. Fletcher's inventions are well and favourably known to the public, but at the forthcoming exhibitions several novelties will be on view, and all the typical exhibits will be shown in action. The articles will include gas cooking and heating stoves, instantaneous water heaters, washing and drying machines, grillers, hot plates, ranges, confectioners' ovens, coffee roasters, workshop tools, &c.; and a professed cook, Miss Young, will be in attendance to explain the apparatus, and to give, in addition, a formal lecture daily on the art of cooking by gas. There can be no doubt that the use of gas for domestic purposes has a very great future, and with regard to much of his apparatus, Mr. Fletcher is, we believe, able to demonstrate that it is economical, expeditious, and cleanly. The Council of the Parkes Museum, in inviting an individual inventor to display his inventions in their building may seem to be taking no little responsibility upon themselves; but it must be remembered that the space at their disposal is far too limited for anything like a complete gas exhibition, and they have, we think, judged rightly in furthering as a first experiment an adequate exposition of the inventions of one gentleman of acknowledged repute, rather than the inadequate display of the apparatus of many inventors. The exhibition will remain open for three weeks.

SOUTHBOROUGH WATERWORKS.

We are glad to learn that Southborough has at last obtained the priceless boon of a good supply of excellent drinking-water. The report of Dr. Frankland declares it to be of excellent quality for drinking, and being also very soft it is well adapted for washing. The local board of the town have had to overcome considerable difficulties, including opposition from a section of the ratepayers who dreaded the effects of costly works on the rates. Seeing, however, that Southborough, like its neighbour Tunbridge Wells, is growing more of a residential place and less of a seasonal resort year by year, it is certain that the local board have acted for the best interests in securing a pure water-supply. Owing to the nature of the geological formation, and the fact that many of the springs are ferruginous and therefore unsuitable for dietetic purposes, the quantity of water of a suitable nature in the neighbourhood is limited. The spring which the local board have secured diminished very considerably during the exceptional drought of last year, as was to be expected; but at its lowest would have supplied ten gallons a head per diem for all who are likely to use it for some few years to come, without the assistance of any stored water. As, however, the population of Southborough has trebled almost within the space of a single generation, the question of storing the surplus of the rainy season for the wants of the dry season must soon arise. The opening ceremony was performed by Mr. Deacon, who, as lord of the manor, had granted a portion of the common on which to erect the pumping station. The day was observed as a general holiday, the tradesmen closing their shops at midday and a treat being given to the school children, while the local board and several of the gentry and tradespeople of the town met at a public luncheon.

XANTHELASMA.

THE histogeny and histology of xanthoma or xanthelasma have received fresh consideration at the hands of Dr. Karl Touton of Wiesbaden, who has published a long essay in the *Vierteljahresschrift für Dermatologie und Syphilis.* He regards xanthoma as a tumour in the narrow sense of the word. It is a sharply defined, independent new growth, composed of elements which do not normally exist in the part in which it grows—that is, the cutis vera. Xanthomata may be mixed tumours. Touton would speak of fibro-xanthoma, sarco-xanthoma, cystadeno-xanthoma, and myo-xanthoma. The cells of which the xanthoma is composed are described as having a sharply-defined membrane, with finely granular or faintly fibrillated contents and large round or oval nuclei. These characters are obscured by the presence of large globules of fat. The fatty infiltration is believed to commence as soon as the development of the cells themselves—a belief which is said to be strengthened by an *observation of* Colin, to the effect that in the majority of cases the small flecks of xanthelasma have a citron-yellow colour, even when they first appear. The article to which we refer contains an excellent account of the literature of the subject.

CORONERS' INQUESTS AND MEDICAL EVIDENCE

ON May 27th an inquest was held at the Royal Hotel, Worksop, before Dr. Housley, district coroner, touching the death of a man aged sixty-four years, who died without having had recent medical assistance. The case is of interest on account of the extraordinary course taken by the coroner, who is stated to have refused to allow the medical man who was called in to see the body a fee for his evidence on the grounds that he (the coroner) "only requested the evidence of the doctor as a common witness." We earnestly hope that our informant—the *Retford News*—has misreported the actual occurrence, for we can scarcely believe that a medical coroner would take such high-handed proceedings. On the *assumption* that the report before us is a true one, we should like to ask Dr. Housley whether he considers it such an easy matter in all cases to say whether life has actually ceased or not. If it has *not*, the body is not within the jurisdiction of the coroner. When scientific men have laboured, without success, *for centuries* to discover an infallible sign of death which shall at *all periods* be within reach of the observer, surely the question requires some one other than "a common witness" to determine it.

THE BRITISH MEDICAL ASSOCIATION.

THE fifty-third annual meeting of the British Medical Association will be held at Cardiff on Tuesday, July 28th, and following three days. An address on Therapeutics will be delivered by Dr. W. Roberts, Consulting Physician to the Manchester Royal Infirmary; an address in Surgery by Mr. John Marshall, Professor of Surgery in University College; and an address in Public Medicine by Mr. T. Jones Dyke, Medical Officer of Health for Merthyr Tydvil rural and urban sanitary districts.

THE TREATMENT OF FEVER AS A SYMPTOM.

WHILE the chief object of all medical treatment is necessarily to eradicate disease by attacking its very beginnings, there are times in which the relief of a pressing symptom may constitute the first important step towards recovery. Fever is such a symptom. How often does one find that, even in the presence of an active morbid cause, the mere remission of temperature for a certain period assists the physician, by obtaining rest for his patient, by gaining time, by quieting irritability in the neighbourhood of a source of mischief, and so converting an acute into a subacute or chronic process. These effects appear in many diseases which are said to run an unvarying course—in typhoid fever and early tuberculosis, for example; and there are good physiological reasons why the abatement of fever in itself should materially aid and tide over other efforts of nature or of art which are designed to cut the root of unhealthy action. It becomes, therefore, a matter of interest to inquire in what way a fall of temperature can thus react upon the local processes which determine the course of fever, and that fever does depend on local causes may probably be accepted as an axiom. All its features tend to show that it is a nervous disorder which acts along the lines of the vaso-motor system, that its method is reflex, and its result a destructive metabolism, which reveals itself in general emaciation, and is most intense at the original seats of morbid irritation. The aim of antipyretic measures must therefore be to allay this nervous overwork by opposing a buffer to the repeated shocks of peripheral stimuli, and this may clearly be accomplished in more ways than one. Thus it is frequently possible, by using narcotics, to lull the excited cerebro-spinal centres generally, and so to weaken their response to provocation. By another agency the constricting influence of the vaso-motor centre may be specially and directly inhibited and the circulatory system proportionally eased, as would seem to be the case when salicylates are employed. In this case, also, the harassed nervous centres share the general rest. The heat-regulating mechanism, too, if it exist as a separate factor, may be restrained by similar means, when its disordered forces would otherwise result in riotous excess of tissue change. In any case, the reduction of fever, besides preventing general loss of power and substance by wasteful molecular action, is directly beneficial in another way. By depleting areas which border on the causal irritant or its habitat, and the intense congestion of which magnifies the force of stimulation, it must react as a sedative at the very source of disease. These observations suffice to show why antipyretics possess a real value even in such diseases as continuous fevers. Apart from the aid they render to the further resources of medical skill, and apart from their action on septic germs, they often appear, by the rest which they procure alone, to constitute the chief element in the cure of febrile disease.

COUNTY COURT MEDICAL ACTION AT BATH.

THE *Bath Herald* of May 23rd gives a full report of an action by Mr. Algernon Sudlow of Castle Combe for the recovery of a small bill for medical and surgical services to the family of Mr. Henry Taylor. The chief services were setting a collar-bone and attending the case, for which 21s. was charged, and eight visits to a case of diphtheria, for which the sum of £1 16s. 6d. was charged. In the latter case Mr. Sudlow was summoned at night and found the child *in extremis.* He tried to detach some membrane from the throat with a brush dipped in a lotion, when the child convulsively closed the jaws and the brush was detached from the handle. It was soon removed from the mouth, but the child was found to be dead. The objection to pay the moderate medical bill was founded on this latter incident, which was of course to be regretted, but was in no way the fault of the medical attendant. We are sorry to see that Mr. Hooper of Ford, surgeon, gave evidence for the defence and questioned the diagnosis and treatment. He would not have used the brush because he thought the case hopeless. The judge made short work of this medical argument, and entirely vindicated the doctor's treatment and charges in what he properly called a battle between skill and death. It is always a pity when patients in an ungenerous spirit seek to evade payment of medical bills. We notice the case with satisfaction as one more instance of the usefulness of the county court in upholding the just claims of an underpaid profession.

CHOLERA IN SPAIN.

THE Spanish Government, which last week interdicted Dr. Ferrán from continuing his "cholera vaccination" pending further inquiry, has lost no time in appointing a Royal Commission for the latter purpose. The Commission commenced proceedings at Valencia on the 29th ult., and obtained evidence concerning the existence of suspicious cases of cholera in the district since the end of March, the number having greatly increased during the past fortnight. Dr. Ferrán was authorised to repeat his inoculations in places visited by the Commission; but it may be doubted if the members are sufficiently acquainted with microbiology to be competent to pronounce an authoritative opinion. Later advices state that the Commission has already reported that cholera prevails, and that the authorities are taking measures to limit the spread of the malady.

TOLERANCE OF MORPHIA IN PERITONITIS.

AT a meeting of the Cincinnati Medical Society in April Dr. Eichberg reported a case of perityphlitis and peritonitis in which during six weeks 340 grains of sulphate of morphia were given and for twelve days of this time as much as half a grain every hour or twelve grains per diem. The patient recovered. Another feature worthy of notice was that after the failure of soap-and-water enemata two ounces of castor oil mixed with four of olive oil proved effective. During the discussion of the paper Dr. Taylor said that the value of morphia in peritonitis depended on the inflammation not being of septic origin, in which class of cases it was useless. He had himself given thirteen grains in seven hours.

REMANDING LUNATICS TO WORKHOUSES.

MR. BARSTOW, the sitting magistrate at Clerkenwell, thinks he has solved the difficulty about remanding lunatics to workhouses by making a *deferred* order for the admission of a lunatic to an asylum and meanwhile ordering the lunatic to be detained in the workhouse. The question arises whether the effect of this form of order is to *compel* the master of a workhouse to admit the lunatic, or whether it simply removes the hesitation to admit because there is a guarantee that the lunatic will not remain long.

"SINGULAR MEDICAL EVIDENCE."

SUCH is the heading of the description of an inquest recently held by Sir J. Humphreys on the body of a man who succumbed to injuries received in "the fatal fight at Poplar," given by our contemporary, the *Echo*. If one or two of the facts recorded were really deposed to by the surgeon who made the post-mortem examination, we should be inclined to subscribe to the opinion that they were, to say the least, somewhat unusual. Mr. Leslie is reported to have said that about *one pint and a half* of thick fluid blood was found beneath the skull cap. His evidence we think has been either misrepresented, or he used the expression as a figure of speech. At the same time we entirely agree with Mr. Leslie that shock produced directly by a blow, and indirectly by mental excitement, must be admitted as a possible factor in causing extensive effusion of blood within the skull. But, apart from this consideration, there is strong circumstantial evidence that the meningeal hæmorrhage was of traumatic origin, for the scalp was markedly ecchymosed, and there was much sanguineous effusion between it and the bone.

THE COMING ELECTION AT THE COLLEGE OF SURGEONS.

IN addition to Mr. Savory, who offers himself for re-election, there are at present only three candidates for election to the Council of the College—Messrs. F. J. Gant, G. Cowell, and Oliver Pemberton. We understand that it is not the intention of Mr. T. Holmes to seek re-election. Applications must reach the secretary on Monday next.

PROPOSAL TO RATE HOSPITALS IN LIVERPOOL.

IT is devoutly to be hoped that the proposal to rate hospitals in Liverpool will be abandoned. How can such a proposal be justified? The medical institutions relieve the rates. By saving the health and life of breadwinners, or by receiving those cases which otherwise would have to be treated in Poor-law infirmaries, they indirectly and directly save the rates. It is alleged that sixty-four charities in Liverpool do so to the amount of £144,000. To tax them would be to discourage all the amenities of hospital charity, which would be a grievous misfortune in any town, but especially in such a town as Liverpool.

DEATH OF J. MONCRIEFF ARNOTT, F.R.S.

THE death is announced, at the age of ninety-one, of James Moncrieff Arnott, F.R.S., F.R.C.S., Surgeon Extraordinary to the Queen. The deceased gentleman occupied a seat at the General Medical Council Board from 1860 to 1865, and was for many years a member of the Council and of the Board of Examiners of the Royal College of Surgeons.

HEALTH MATTERS IN PERU.

THE authorities of Trujillo, an important city in Peru, have, we are glad to learn, been bestirring themselves to improve the sanitary condition of the locality; the refuse heaps which used to be allowed to poison the suburbs have now disappeared, and a healthy promenade is to be laid out with rich and fragrant plants on what was formerly little better than a great cesspit. A new hospital, too, is being built, and will be a marked improvement upon the old one. A complaint is made in the local medical journal that the investigation of such circumstances as the death of a woman in labour, where an irregular practitioner had violently manipulated a shoulder presentation, is extremely difficult in Peru.

HÆMOPTYSIS IN SYPHILIS.

DR. A. W. REYES, in the *Eco Cientifico*, a Cuban medical journal, mentions some cases of hæmoptysis occurring in the second stage of syphilis during treatment by the green iodide of mercury. In one case the hæmoptysis disappeared when the iodide was stopped, and recurred each time this drug was recommenced, so that Dr. Reyes suggests that in some persons the plasticity of the blood is so diminished by this preparation that either by its independent action or by its augmentation of that of the disease it produces a fatty degeneration of the capillaries of the respiratory passages, so giving rise to rupture and hæmorrhage.

DEATH OF SIR WILLIAM MUIR, K.C.B.

WE regret to have to announce the death of Sir Wm. Muir, M.D.Ed., K.C.B., late Director-General of the Army Medical Department, which took place, after a long illness, on the 2nd inst.

RABBETH MEMORIAL FUND.

THE final meeting of the committee of this fund was held at King's College on June 2nd, and the treasurers were empowered to divide the balance of £800 between the Royal Free and King's College Hospitals.

IT is rumoured that his Excellency Earl Spencer will shortly appoint a commissioner to inquire into the management of the House of Industry Hospitals in Dublin.

Pharmacology and Therapeutics.

EXPERIMENTAL RESEARCHES ON ANTIPYRIN.

PROFESSOR GIUSEPPE CESARI has published the results of some important researches on antipyrin made in the laboratory of experimental pharmacology in the University of Modena. In frogs, a single dose of from three to four centigrammes injected under the skin produced in about a quarter of an hour dilatation of the pupil. Reflex irritability was at first diminished, then gradually increased; the respirations became slower and then irregular, being finally arrested. At last mydriasis appeared, together with some exaggeration of reflex irritability, persisting for several days. With doses of from five to ten centigrammes the mydriasis set in rapidly and was more complete; there were paralysis, spasmodic contractions, mostly of a tonic type in the anterior and of a clonic in the posterior extremities, exaggeration of reflex, suspension of respiration, and insensibility of the cornea; finally, death, with arrest of the heart in diastole, occurred in from two to twenty-four hours. In rabbits, as much as sixty centigrammes in one dose, or in two doses at an interval, did not occasion much disturbance to the animal; generally the antithermic action showed itself in about half an hour. Injected in doses of a gramme, in an hour the temperature was decidedly diminished, and in from one to two hours it was greatly reduced; there was muscular twitching, general tremor, wagging of the head, suspension of reflex, and slight paralysis of the limbs, especially of the anterior extremity; these phenomena disappearing one after another in six or seven hours after the injection. When two or more grammes were injected in a single dose the antithermic action was more rapid and more powerful, reducing the temperature nearly 4° C.; there was complete dilatation of the pupil and marked hyperæmia of the ear; collapse occurred quickly, and in one or two hours after the introduction of the drug the animal was seized with convulsions, increasing in severity and duration, mostly of a tonic character in the anterior and of a clonic in the posterior extremities, which convulsions were repeated with still greater intensity on the application of the interrupted galvanic current, with marked retraction of the head on the back. In these doses antipyrin generally caused death in rabbits in about five hours. In dogs, antipyrin, injected in doses of from two to three grammes, caused in an hour or rather more a copious white salivary secretion, accompanied by attempts at vomiting, and then by vomiting of alimentary substances, with more or less prostration, general trembling, especially of the posterior limbs, whining, and fits of restlessness; then dilatation of the pupil was observed, extreme and persistent with a three-gramme dose, in which case the reduction of temperature was somewhat greater than if a dose of from a few decimals to two grammes was given, between which limits the reduction varied but little. The respirations and cardiac beats gradually increased, and sometimes returned simultaneously almost to normal. In the human subject, antipyrin administered by the mouth in doses of from one to two grammes, repeated till four grammes had been taken during the space of at least three or four hours, always reduced the temperature from a few decimals to 2°. There was often produced almost immediately a sense of heat in the face, sometimes a slight moisture of the skin, and more rarely sweating. In exceptional cases it produced a kind of coryza of short duration, and vomiting. The pulse and respirations rose and fell with the temperature. The drug could be detected in the urine.

VERBASCUM.

From time immemorial verbascum has enjoyed considerable reputation as a remedy for phthisis. The Irish peasants employ by preference the leaves of the large Verbascum thapsus. They use 100 grammes of the fresh leaves or thirty of the dried in a litre of fresh goat's milk: this mixture, allowed to macerate for ten minutes, is then filtered, sweetened, and drunk warm. Two or three litres are consumed every day. Dr. Quinlan has tried this treatment for a period of two years in 127 patients. He believes that in the premonitory and "pretubercular" stage of consumption the remedy possesses curative and nutritive properties more marked than those of cod-liver oil, and nearly equal to those of koumiss. The increase of body weight is certainly due to the verbascum, since the milk alone does not yield the same results. The remedy effectually relieves cough, checks diarrhœa, and alleviates all the symptoms of consumption except the sweatings. The leaves smoked like tobacco relieve the symptoms of irritation of the respiratory passages.

MYOCTONINE.

Myoctonine and lyaconitine are the names given to two substances separated from the yellow-flowered Aconitum lycoctonum by Messrs. Dragendorff and Spon (*Pharmaceutical Journal*). Myoctonine has been physiologically investigated by Herr Salmonowitz. It is a yellowish, bitter, amorphous powder, which dissolves easily in chloroform, absolute alcohol, and benzene. It is a powerful poison, resembling curare in its action, and acts mostly energetically when introduced directly into the circulation.

WALNUT-TREE BARK.

J. C. Ugaz, writing in the *Cronica Médica* of Lima, calls attention to the vesicating property of the inner bark of the walnut-tree. He cut a square of about two inches each way, stripped off the outer bark, macerated it in vinegar for a quarter of an hour, and applied it to his arm on going to bed. He was disturbed in his sleep by the discomfort produced, but, wishing to carry out the experiment, controlled himself. After about an hour he awoke in severe pain, and tore off the bandage and piece of bark. In the morning there was no pain, but three large blisters filled with serum and covered with a blackened skin had appeared. The writer also applied the bark to the lip of a boy suffering from hypertrophic lupus, and dusted the blister with calomel. He did not see the boy for eighteen days, and when the latter returned he was completely cured. Señor Ugaz asks, "Can walnut and calomel be specifics for lupus?"

EUODIA LONGIFOLIA.

The *Pharmaceutical Journal* states that the leaves of a rutaceous plant, Euodia longifolia, a native of Fiji, have been successfully employed by native women as a preventive of miscarriage. The infusion of the leaves is used for several months previous to parturition. It is made in a most effectual manner by rubbing the leaves into a pulp with cocoa-nut milk, adding more liquid and then straining, the resulting greenish mixture forming the medicine.

PURGATIVES.

The plant Leonotis leonurus, a native of Turkey and the Cape, possesses purgative properties, and is used in the form of decoction as an emmenagogue. The leaves of Ipomœa pandurata also contain a purgative resin.

CORNUTINE AND ERGOTININE.

In a recent memoir M. Kobert announced the discovery of three new principles in ergot of rye—ergotinic acid, sphacelinic acid, and cornutine. Kobert did not state that he had prepared these three bodies in a state of chemical purity, but maintained that each had a special physiological action. M. Tanret has re-investigated the question. According to him, cornutine is but ergotinine somewhat altered by exposure to the air. If an acidulated solution of ergotinine be exposed for a longer or shorter time to the air, it becomes more and more coloured, and acquires all the characters of cornutine. The transformation takes place more rapidly under the influence of heat. The experiments of M. Dujardin-

Beaumetz, M. Budin, and Chahbazian prove that ergotinine is a powerful medicinal agent, the administration of which may be attended by severe toxic effects.

COCAINE AS AN ANODYNE.

If a saturated solution of hydrochlorate of cocaine in strong nitric acid be applied to the skin, instead of the painful smarting of the acid alone, a slight pricking sensation is the only sensory effect produced. An eschar is formed, but takes a longer time to appear than if the nitric acid be used alone. These results have been obtained by Messrs. Randolph and Dixon (*Pharmaceutical Journal*).

AGARICIN IN THE SWEATING OF PHTHISIS.

Professor Masius of Liège, in a clinical lecture recently delivered, mentions the favourable results he had obtained by the use of agaricin in the excessive sweating of phthisis. He began with a single dose of five milligrammes, and followed this up with increased doses of ten and eleven milligrammes. In some cases the five-milligramme dose was ordered morning and evening.

THE BACILLUS OF CHOLERA.

DR. E. VAN ERMENGEN, who was despatched by the Belgian Government last year to investigate the cholera at Marseilles, has published his report,[1] with many additions and illustrations, forming a monograph of some 350 pages. We have previously had occasion to mention Dr. van Ermengen's researches, which entirely corroborated the conclusions arrived at by Dr. Koch; and the volume before us practically consists of a thorough and extensive survey of all the facts which bear upon the famous "comma bacillus," including detailed analysis and criticism of the numerous observations made by others upon the subject during the past year. The first part of the report consists of an account of the manner in which the author fulfilled his mission. His first business was to proceed to Paris, where he visited M. Pasteur's laboratory, and was shown many preparations by Dr. Roux, who had recently come from Toulon, where he had been studying cholera with M. Strauss. Their specimens exhibited the comma-shaped bacillus of Koch, but they declared that such organisms were not invariably present in the choleraic intestine and evacuations. Arrived at Marseilles on the 10th of August, Dr. van Ermengen was enabled to pursue his researches in the laboratory that had been placed at the disposal of MM. Nicati and Rietsch. He thus arrived at the conviction that the "microbe of Koch possesses specific characters, as shown on cultivation," and on his return to Belgium he proceeded to Berlin, where he completed his knowledge of the subject under the guidance of Dr. Koch. He then devoted his whole time to the task of verifying and extending his researches, the result of which is to be found in the pages of the report, which we may briefly summarise.

The morphological characters of the bacillus are fully described, and the variations in them according to the nature of the media in which the organism is cultivated and the stage of its development. The author expresses a preference for methyl-blue staining, and appends numerous photograms of the actual preparations. The microbe, in his opinion, is more allied to spirillum than to other bacteria; and he points out that it is endowed with very active motility, which is much influenced by temperature. For the movements, mostly undulatory and best seen in broth or serum cultures, are arrested by a temperature of about 16° C., whilst they are very active at the temperature of the blood. The characteristic appearances shown in the gelatine cultures are of course dwelt upon, and also the behaviour of the microbe when cultivated in other media, as agar-agar, coagulated serum, and fluid media, as broth and fluid serum. Although the appearance of these fluid cultures is not distinctive, they are useful for showing the rapidity with which the comma bacilli may develop. He also succeeded in cultivating the microbe in milk, potato, and slightly acid fruits, but found that it did not grow in wines and beers rich in alcohol, or containing a certain amount of acetic acid. The biological characters of the micro-organism are next discussed; its remarkable power of multiplication, and its vitality under favourable conditions of temperature and moisture. A limit is, however, soon placed to this fecundity by the absence of oxygen or the noxious influence of putrefactive changes. The influence of chemical agents, of especial importance in estimating the value of disinfectants, is also described. The author has not been able to ascertain that the organism produces spores, for he shows that the bodies simulating such spores are infertile and probably degenerate fragments. Nor does he think it necessary that they should possess this mode of generation in view of the conditions under which they exist; and he regards the absence of sporulation as a further mark of distinction from the class of bacilli, and of alliance with that of the spirilla. A long note at the end of the volume again discusses this point, to which greater prominence has been given by the statements of Ferran. Dr. van Ermengen has taken the pains to investigate Ferran's work, and is enabled to confirm some of his statements, which go beyond those of Koch in a demonstration of a complete developmental cycle of the comma bacillus when cultivated in a special manner. The inferences drawn by Ferran from observing the presence of globular bodies in connexion with the spiral filaments—viz., that there is evidence of spore formation and a mode of reproduction which entitles the microbe to a higher place in the class of fungi than the schizomycetes—are not admitted by van Ermengen, who cautiously says that the matter is open for further investigation. As to Ferran's alleged discovery of an attenuated virus that is capable of conferring immunity on inoculated subjects, we are told that a commission of inquiry has been appointed by the Brussels Academy of Medicine. "And if," writes van Ermengen, "these discoveries be proved to be true, then the pathogenic power of Koch's comma bacillus will henceforth rest on demonstrations which will be beyond cavil, for it will have been proved upon man himself. As to the discovery of a preservative cholera vaccine, which to some may seem too good to be true, may it one day be established with all needful experimental rigour, and shed eternal honour on the microbiologist who was the first to foresee its probability!" Returning to the body of the work, we find a discussion of the proofs upon which the cholerigenic powers of the bacillus are based, with the remark that if such proofs solely rested upon the inoculability of animals, the microbic nature of many diseases would still be doubtful. The first place in such testimony must, however, be accorded to the invariable and exclusive occurrence of the bacilli in relation to cholera. Inoculation experiments have, however, advanced the subject beyond this stage, for, setting aside Ferran's assertions as being yet unconfirmed, there has been accumulated abundant evidence of successful inoculations in guinea-pigs. Many of these are quoted by van Ermengen, who has contributed much to the question himself. He then proceeds to discuss the arguments and facts advanced against Koch's doctrine, especially those of Lewis, and of Finckler and Prior. He demonstrates, what is now generally accepted, that the curved organisms described in other conditions and diseases than Asiatic cholera, by these and other observers, differ notably in their biological characters from the bacillus of Koch. In a supplementary note Emmerich's discovery of a bacterium in the blood and tissues of choleraic subjects is subjected to detailed criticism; but the observations of Drs. Klein and Gibbes are held to be sufficiently refuted on the same grounds as those on which the statements of Finckler and Prior are met.

Dr. van Ermengen in the third part of his work proceeds to show how the adoption of the comma bacillus as the cause of cholera harmonises with known facts of the disease; and he employs for this purpose a sort of running commentary upon an address of the epidemiologist, Dr. Lefebvre, before the Brussels Academy, which embodied the accepted teachings on the pathogeny of the disease. This most interesting chapter, which space will not allow us to abstract, is followed by another on the practical deductions from the adoption of Koch's teaching. First, there is the need for the institution of bacteriological laboratories and the instruction of medical officers in the methods of detection and verification of micro-organisms, on the view that Koch's discovery his furnished the means of making a certain diagnosis of the disease and of enabling the authorities to be warned of the occurrence of cholera in time to take measures for preventing its spread. Such measures would include a strict supervision of the frontier, compulsory notification of suspected cases, the formation of sanitary committees, the appointment of public disinfectors, institution of hospitals, prohibition of imports of fruits, vegetables, &c., from infected countries, and the rigorous supervision of laundries, dairies, &c. The various modes of disinfection are discussed in detail: physical agencies—as desiccation, dry and moist heat; chemical agents, including gaseous disinfectants—as bromine and chlorine, and fumigations with sulphur, &c.; fluid disinfectants, restricting the term only to those agents which within half an hour destroy all choleraic microbes under all circumstances—as corrosive sublimate and carbolic acid, sulphate of copper, chloride of lime and sulphate of iron, salicylic, boric and thymic acids, laudanum (1 per cent. kills the bacilli), and chloroform (1 in 30 or 40), alcohol (1 in 10). Observations follow confirmatory of Koch's statement as to the destructive action of putrefaction upon the comma bacilli; and the less need for vain attempts at disinfecting latrines with the view of destroying the cholera virus. The importance of disinfecting the excreta, for which a 5 per cent. solution of carbolic acid is advised, and the need for obtaining pure supplies of water and food, are insisted on. The whole argument is summed up in conclusions which we regret not to be able to reproduce in detail. Suffice it to quote the following:—

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[1] Recherches sur le Microbe du Choléra Asiatique. Rapport présenté à M. le Ministre de l'Intérieur. Par le Dr. E. van Ermengen. Paris: G. Carré. Bruxelles: A. Manceaux. 1885.

"17. The discovery of the comma bacillus is of the greatest importance for diagnosing choleriform attacks of doubtful nature which are produced at the commencement of epidemics, and for the institution of prophylactic measures, the more efficacious because such early diagnosis enables them to be undertaken in time.

"18. The application of bacterioscopic processes for the diagnosis of true cholera does not present any serious practical difficulties, and it would be extremely desirable, in view of the serious threats of an invasion of Belgium by cholera, that a sufficient number of medical men appointed to the sanitary service should be initiated therein with as brief delay as possible.

"19. The knowledge of the biological properties of the choleraic microbe, of its feeble resistance to desiccation, and of the absence of a stage of spore-formation, affords valuable facts for prophylaxis. It places a limit on the excessive use of disinfection, and puts us in possession of the simplest and surest means of combating its effects."

The monograph is furnished with several appendices, and it is further admirably illustrated. Whatever be the final outcome of the question, this work of Dr. van Ermengen's will rank as one of the most important contributions to the history of the scientific investigation of the pathogeny of cholera.

THE SANITARY CONFERENCE AT ROME.

SINCE our last notice of the proceedings of the International Sanitary Conference at Rome some substantial work has been done by the Technical Commission, which is preparing a series of resolutions for submission to the entire Conference, when this body, which includes the diplomatic representatives, meets again. After voting that quarantine measures by land were impracticable and hence useless, the Commission proceeded to discuss the question of maritime quarantine. The discussion on this point was maintained at considerable length, the actual proposition before the Commission being one by Dr. Sternberg (United States of America), to the effect that an arbitrary time quarantine for vessels arriving from infected or suspected countries was not justifiable. During the course of the discussion, which took place on Monday, May 25th, Dr. Koch (Germany) suggested that a difference should be made between ordinary passenger ships and vessels conveying either troops or emigrants in large masses. Later on, the English and Indian delegates, who were evidently in sympathy with the proposition of Dr. Sternberg, were requested to explain the system which in England had superseded quarantine; and the system of medical inspection coupled with the immediate isolation of the sick was then fully set out by Dr. Thorne Thorne (Great Britain), who contended that his country was the only one that had loyally carried out the full intentions of the Vienna Conference of 1874 in this respect. Sir Joseph Fayrer (India) maintained that there was no proof that a vessel sailing from India had ever conveyed cholera into any European country. Dr. Rochard (France) held a different opinion, but on being asked by the Indian delegates to name the circumstances justifying this view, no answer was apparently forthcoming. Several delegates, such as the Brazilian, felt that the subject required further elucidation and study.

At the sitting of Wednesday, May 27th, Dr. Proust (France), with a view of defining more precisely the points to be debated, submitted a scheme dealing first with the measures of prevention at the ports of departure, then with the sea passage, and lastly with the ports of arrival. This being unanimously accepted as the basis of discussion, Dr. Sternberg (United States) proposed that in all ports medical officers appointed by the consuls should have power to inquire into the sanitary state of the port and shipping. Owing to the abstentions this was lost. Dr. da Silva di Amado (Portugal) proposed that, since the consuls had to endorse the documents relating to the freedom from disease in ports, they ought to be allowed to take part in the inspection of the sanitary state of vessels leaving for the ports of countries they severally represented. The abstentions were again numerous, but a small majority carried the proposition. Dr. Proust's proposals were next considered. The first related to measures of sanitation to be adopted at ports of departure whenever cholera was prevalent. The lading of vessels was only to be effected after cleansing, and, if need be, disinfection of the holds, &c.; and the medical officer of the ship, who in the case of all infected ports was to be approved and maintained by the Government, was, together with the captain, to certify as to the proper sanitary state of the vessel. Passengers were always to be examined before embarking, and all sick of cholera or suspected persons were to be refused. Luggage, linen, &c., was to be carefully looked after, and, if need be, disinfected, the clothing of persons having suffered from cholera being always disinfected. Any case of cholera occurring on board during the stay in the port was to be immediately removed to hospital, cleansing and disinfection of the ship, &c., to follow.

On Friday, the 29th, a number of resolutions were passed with reference to the action to be taken as to suspected ships during the sea passage. They related mainly to measures of cleanliness, disinfection, and ventilation, and received an all but unanimous assent. These resolutions were followed by others relating to ships actually suffering from cholera during the passage, and they were in the main such as have long been adopted in this country.

At the sitting on Saturday, the 30th, a series of proposals formulated by a subcommittee with reference to the passage of vessels from the East to the Mediterranean by the Red Sea and the Suez Canal, were submitted for discussion. They were taken *seriatim*. The first related to a compulsory medical inspection at Suez by an officer to be appointed by some International Commission, and who would have authority to decide if the vessel was to be regarded as "suspect" or not. If not, it would at once pass the canal freely. The British and Indian delegates opposed this. Sir Joseph Fayrer explained that he and his colleagues were in no way opposed to inspection for the mere purpose of ascertaining the state of health on board; but he refused to allow that any locally appointed medical officer should supersede a British medical officer in deciding whether anyone on board an English ship was suspected of having some choleraic affection or not. Sir G. Hunter demanded that British ships should, under all circumstances, have free passage through the Suez Canal, provided they did not touch the shore. This was refused. Dr. Thorne maintained that the proposal of the subcommittee was not one of inspection only, but that it was the first step towards the imposition of quarantine, which England had opposed, and which had been proved to be useless. The proposal was, however, carried by a large majority of delegates. Later on it was proposed that if the visiting medical officer suspected any case of cholera on board any ship, all passengers and crew should be landed, and that the ship should be detained for five days to see if any further case occurred. Dr. Lewis at some length contended that the danger did not lie in shipping, and that although cholera always prevailed in India, a country with which Australia was in constant communication, yet that the disease had never been conveyed to Australia. Other delegates demanded a much [illegible] period than five days, the Spanish delegate insisting on at least ten days after the last case had occurred amongst those landed. Sir Joseph Fayrer once more offered all information at Suez, so that local officials could report to their respective Governments, and Dr. Thorne maintained that if vast masses of passengers and crews were landed in the horrible lazarets of the Red Sea shore, disease would not be stayed, but spread; also that we had no right to deposit in the midst of Egyptian populations that which we feared to receive on our own shores. The Conference had, however, decided in favour of the quarantine system, and the detention of all passengers with suspected cases on board was carried by a large majority. Some abstained from voting.

Several subcommittees are at work daily, as well as the Technical Commission. The subcommittees are dealing with disinfectants, regulations as to small vessels, pilgrimages, &c.

On Wednesday, the 27th, his Majesty the King of Italy gave a State banquet to the members of the Conference. Before the banquet the presentations were made, and the king then conversed for some time with each of his guests. The diplomatic corps and the officers of the king's household attended the dinner.

POOR-LAW MANAGEMENT IN ST. PANCRAS.

MR. T. ECCLESTON GIBB, who has just resigned the office of clerk to the guardians of St. Pancras, has issued an interesting statement on Poor-law management in that parish during the last five years. In this period much effort has been made to prevent out-door relief becoming the means of pauperising those who are in necessitous circumstances. In the form of medical out-door relief State aid presents the first opportunity for the poor to become dependent; it is, as Mr. Gibb says, the first downward step in the career of pauperism, and the need for intelligent relieving officers is therefore urgent. During the last five years the amount expended upon out-door relief has been gradually reduced by more than one-third. This reduction has been brought about by a rearrangement of the duties of relieving officers, giving better opportunity for a more thorough investigation into the condition of those applying for assistance, by a recognition of the principle that destitution and not simply poverty is the only claim to relief that the law recognises, and further, by offering to applicants admission into the workhouse, instead of granting a dole which is in practice insufficient for their maintenance. The effect has naturally been to increase the expense of in-door relief, but Mr. Gibb tells us that scarcely one-fifth of the applicants for relief who were offered an order for the workhouse accepted it, the remainder, with few exceptions, having gone on without any relief at all. The extra cost has not therefore been excessive, and in its effect upon the parish has been distinctly beneficial, for while the cost of out-door relief falls upon the parish, that of in-door relief is partially chargeable to the common poor fund. The same principle has been adopted in the case of widows with children; it has often been found sufficient to remove one or two of the children to the schools at Leavesden to enable the mother to maintain the rest of her family; and this is obviously a far better course than the administration of out-door relief, which would educate all the children in the knowledge that they could always rely upon the same agency for assistance whenever it was required. Here, again, the operation of the common poor fund is beneficial in encouraging the guardians to maintain children in suitable schools, for while the cost of maintenance under these circumstances, together with a share in the salaries and other expenses, is chargeable upon the common fund, every child maintained in the workhouse deprives the guardians not only of fivepence per day in respect of each child, but also the amount which might have been recovered had the place of the child in the workhouse been occupied by an adult.

After referring to the savings thus effected, Mr. Gibb points out how they have been lost by an increase of expenditure over which the guardians have no control; thus, the sum paid to the Metropolitan Asylums Board has during the last four years been at the rate of more than £10,000 a year more than in the previous four years; and the whole of this has arisen through that Board receiving into its hospitals for infectious disease persons who were not paupers. Again, the care of lunatics has during the latter period entailed an increased cost of over £2000 a year.

Mr. Gibb leaves his readers to draw their own conclusions from his story. Upon the judicious administration of poor relief depends whether the assistance given to necessitous persons shall be beneficial or responsible for considerable harm: It is within the power of the ratepayers to elect representatives who will properly appreciate their duties in this respect, or, as often in past times, to leave the control of poor relief in the hands of those who will receive in payment of rent the sums which have been given to the poor.

IRISH MEDICAL ASSOCIATION.

THE annual meeting of this Association was held on the 1st inst., the chair being occupied by the President, Dr. Hemphill. The Council in their report referred to the Medical Act Amendment Bill, and to a revision of the law relating to superannuation of Poor-law medical officers, neither of which do they expect will come before Parliament this session. The question as to whether medical officers of health are entitled to special remuneration for inspecting labourers' dwellings and reporting on their condition has, after a prolonged struggle and considerable expense, been finally settled in a satisfactory manner by the Court of Appeal. The report also referred to several cases in which prison surgeons were summoned from country districts to give evidence before the Prisons Commission in Dublin, and were compelled to pay the substitutes appointed to discharge their duties *during their absence, and this though in one* instance the judge of assizes ruled that the authorities, and not the surgeon were liable. The report was adopted, also the following resolutions:—

"That the council be instructed afresh to continue to urge the Government to adopt the amendments of the Medical Act Amendment Bill approved of by this Association, including one securing uniformity of final examination fee, and that, in the event of such amendments as seem to them necessary not being introduced into the future Bill, the support of this Association shall not be given to that measure. That this Association, having observed with great regret that, in consequence of the persistently continued opposition given to it by certain members for Irish constituencies, the Union Officers' Superannuation Bill has not been pressed upon the attention of Parliament, again asserts its opinion that the Poor-law medical officer is entitled, in equity, to receive a pension, as a matter of right, whenever he shall be incapacitated from the discharge of his duty. *This Association therefore earnestly* urges the Government to exercise its influence to pass a measure so generally approved and admittedly so just in its principle; and furthermore desires that the council will continue to use its best endeavours to have such a measure promoted on every opportune occasion. That this Association desires to express its great gratification at the success of the measures taken by the council in establishing in the law courts the right of medical officers of health to payment for their services under the Labourers (Ireland) Act, as well as in vindicating many other principles important to the profession in Ireland."

The members and several guests dined together in the Albert Hall of the Royal College of Surgeons in Ireland, presided over by the President for the ensuing year, Dr. Edward Hamilton.

CHOLERA IN JAPAN.

THE report of the director of the Central Sanitary Bureau of Japan upon the epidemic of cholera which occurred in that country in 1879 has just been published. It contains a short history of the disease in Japan in that year, an account of the operations then carried out by the Home Department in connexion therewith, and the imperial decrees and Government notifications *bearing on* the same subject. The disease first showed itself on March 14th, and the last case occurred on December 27th; the first appearance of cholera in Japan having been in 1877. The total number of persons attacked was 162,637; *the* deaths amounted to 105,786. The original returns from each of the prefectures are so diffuse that their compilation would form a bulky volume, *consequently* only certain items have been selected from them and published in this report. All the original returns, however, are kept in the Sanitary Bureau for reference. The decrees published by the Government with the view of checking the spread of the disorder contain precise directions as to the immediate notification of the existence of a case of cholera to the local authorities of the place in which it has occurred, rules as to quarantine, the removal and disposal of the dead, and the disinfection of all polluted articles, for which latter purpose the inspecting officers in a locality infected with cholera were directed at any time to furnish to an applicant any of the various kinds of disinfectants at a certain fixed price; the poor, however, were to be supplied gratuitously. At the close of the epidemic rewards were granted to the officials who had had the management of affairs connected with the precautionary measures, and compensation to those who had been attacked by the disease, and the expenses incurred in the burial of officials who had been carried off by it were refunded to their families. The reason for the adoption of these rules was that it had been found that a large number of such officials had either died of the disease or had undergone great sufferings from it. Substantial recognition of their services was also awarded to all medical men who had been attacked with cholera while devoting themselves to their duties of attending upon and treating patients suffering from the disease.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Bedford Union Rural Sanitary Authority.—The annual report states that the estimated population of this district is 23,670, and the death-rate for 1884 is a fraction over 16 per 1000, the deaths of children under one year being as low as 18 per cent. of the total deaths; the birth-rate was 31 per 1000. Under the heading of diseases of the year, Dr. Prior gives a brief account of the mortality from the principal zymotic diseases. Small-pox and measles have been comparatively absent; scarlet fever has prevailed in several parishes, but only two deaths have been registered from this cause; diphtheria caused fifteen deaths, Dr. Prior stating that some of these might have been prevented had parents been willing to allow their children to be moved to hospital. Four outbreaks of enteric fever occurred during the year; in each case it is believed that the disease arose as the result of impure drinking water. The report of the sanitary condition of the district is somewhat meagre.

Northampton.—The death-rate of this borough in 1884 was 17·8 per 1000 calculated upon an estimated population of 55,930; the birth-rate was 34·36 per 1000. Diarrhœa caused an increased death-rate among children under one year of age, the proportion of deaths at this period of life to deaths at all ages being 35·8 to the 100. Small-pox caused no death, but one case was imported from Homerton, giving rise to two others. With the exception of diarrhœa, already mentioned, the deaths from zymotic diseases were few, typhoid fever and diphtheria, however, prevailed somewhat more extensively than in previous years. Reference is made to the failure of the water-supply to the town during the summer months; for days together in some parts the inhabitants could not procure any water at all; the control of the town water-supply having passed into the hands of the Corporation, Dr. Cogan urges upon the Council the necessity for making further provision. The sewers in several streets have been reconstructed, evidently not before this was required. Improvements and alterations have been made in a number of houses, and in many others the drains have been connected with the sewers. Dr. Cogan calls attention to the need for controlling the drainage in newly built houses on account of the frequent nuisances therein arising from drainage defects, and he recommends the Council to adopt building regulations similar to those published by the Local Government Board. During the year a considerable number of nuisances have been abated, relating chiefly to defective drains, dirty houses, and the improper keeping of animals. Various kinds of diseased meat were destroyed as being unfit for human food, and two persons were convicted for exposing for sale meat in this condition.

Hexham (Rural).—The Hexham Union comprises a population of 34,086, of which all but 5919 inhabitants of the town of Hexham are under the jurisdiction of the rural sanitary authority. In consequence of the appearance of cholera in Europe, attention has been given in this district to the water-supplies, and during the summer in some villages work was carried out with the object of increasing the amount. Small-pox and typhus fever were almost absent, only one case of each being reported during the year. Enteric fever, scarlet fever, and diphtheria were, however, more prevalent, although not appearing in epidemic form. The death-rate during the year was 16·1 per 1000, deaths from diseases of the zymotic class being 8·4 per cent. of the total deaths and 1·3 per 1000 of population; the deaths of children under one year of age being 20·4 per cent. of total deaths.

Llanelly (Rural).—Dr. Thomas gives a brief account of the procedure adopted in this district for dealing with infectious diseases, and regrets the absence of any hospital in which cases can be satisfactorily isolated. Disinfection is, however, carried out, and infected bedding and clothes burnt when necessary. Referring to the bye-laws which provide for the removal of all privy accumulation once a week, and of house refuse twice a week, he urges the strict enforcement of these regulations. Several cottages in which typhoid fever appeared were found in so unsatisfactory a condition that they had to be closed and demolished. An outbreak of diphtheria occurred among children attending a school which was found in a bad sanitary condition, especially as regards the privies and the ventilation; these were remedied, and no subsequent cases occurred. Dysentery also broke out among the children of a farmhouse, which was attributed to the drinking of drainage-water from some marshy land. Phthisis was prevalent, the result, Dr. Thomas believes, of living in "damp, dark, ill-ventilated cottages." An interesting story is told of the pollution of drinking water by its passage through galvanised iron pipes, the carbonic acid of the water dissolving the zinc; analysis showed that in each gallon of this water there were 6·4 grains of carbonate of zinc in solution. The death-rate for the whole district, which has a population of 26,800, was 15·66 per 1000 during the year; that of children under one year being 12·36 per 100 births, and 26·92 per 100 deaths.

Kingston-on-Thames (Urban).—The report on the sanitary condition of the borough of Kingston-on-Thames during 1884 shows that, based upon an estimated population of 21,912, the birth-rate was 32·4, and the death-rate, after excluding those deaths in the union workhouse not belonging to the borough, 16·3 per 1000. This death-rate showed a slight decline from the rates recorded in the borough in the preceding three years, which were 17·0, 16·7, and 16·9 respectively. The mean rate in the six years 1879-84 was 17·2, which is a comparatively low rate for an urban district, but cannot be estimated at its true value without due consideration of the age distribution of the population and the calculation of death-rates at groups of ages. The rate of infant mortality, measured by the proportion of deaths under one year to registered births, was equal to 122 per 1000, which is disproportionally high compared with the death-rate at all ages. This comparatively high rate of infant mortality appears to have been due partly to the epidemic prevalence of measles in the spring and to excessive diarrhœa fatality in the summer. The death-rate from zymotic diseases was also higher than it should be in a population having a rate from all causes not exceeding 16·3, and was equal to 2·37 per 1000; the zymotic rate, however, was somewhat lower than the rate from the same causes in the outer ring of metropolitan suburban districts, or in England and Wales generally. The 52 deaths from zymotic diseases in Kingston last year included 16 from measles, 17 from diarrhœa, and 9 from diphtheria. The mortality from measles and diphtheria exceeded the average for all England, while that from all the other zymotic diseases was below the average. The medical officer of health (Mr. E. M. Shirtliff) again points out the disadvantages under which the sanitary organisation of the district labours through the want of hospital accommodation for infectious diseases and of a disinfecting oven. Apart from the constant risk of the importation of small-pox from London, hospital accommodation affords the only really efficient means for controlling an outbreak of scarlet fever. The high rate of mortality from diphtheria is attributed to the escape of sewer gas into the houses, through inefficient ventilation of sewers, and of soil-pipes in the house.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 4893 births and 3590 deaths were registered during the week ending May 30th. The annual death-rate in these towns, which had been equal to 20·4 and 21·1 per 1000 in the preceding two weeks, declined again last week to 21·0. During the first eight weeks of the current quarter the death-rate in these towns averaged 21·9 per 1000, against 22·7, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 14·6 in Brighton, 15·5 in Halifax, 15·7 in Derby, and 17·8 in Nottingham. The rates in the other towns ranged upwards to 28·5 in Cardiff, 28·7 in Blackburn, 29·6 in Newcastle-upon-Tyne, and 34·3 in Preston. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 463 and 510 in the previous two weeks, declined again to 487 last week; they included 174 from measles, 125 from whooping-cough, 56 from diarrhœa, 43 from small-pox, 32 from "fever" (principally enteric), 31 from diphtheria, and 26 from scarlet fever. These zymotic diseases caused the lowest death-rates last week in Brighton and Bolton, and the highest in Blackburn, Preston, and Cardiff. The greatest mortality from measles occurred in Manchester, Birkenhead, and Newcastle-upon-Tyne; and from whooping-cough in Oldham, Preston, Cardiff, and Blackburn. The death-rates from "fever" and scarlet fever were exceptionally low. The 31 deaths from diphtheria in the twenty-eight towns included 17 in London, 4 in Cardiff, and 3 in Portsmouth. Small-pox caused 69 deaths in London and its outer ring (inclusive of 17 in the metropolitan asylum hospital ships and camp at Darenth), 1 in Bristol, 1 in Manchester, 1 in Sheffield, 1 in Hull, and 1 in Sunderland. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had steadily increased in the preceding nine weeks from 830 to 1374, further rose to 1389 at the end of last week; the admissions, which had ranged between 354 and 211 in the previous four weeks, were 272 last week. The Highgate Small-pox Hospital contained 72 patients on Saturday last, 23 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 291 and 305 in the preceding two weeks, were 302 last week, and exceeded the corrected weekly average by 15. The causes of 86, or 2·4 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Nottingham, Brighton, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Hull, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·4 and 21·2 per 1000 in the preceding two weeks, further declined to 20·5 in the week ending the 30th ult., and was 0·5 below the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·3 and 16·1 in Dundee and Aberdeen, to 22·9 in Paisley and 24·9 in Glasgow. The 500 deaths in the eight towns showed a further decline of 17 from the number returned in the previous two weeks, and included 27 which were referred to whooping-cough, 11 to measles, 10 to diarrhœa, 6 to "fever" (typhus, enteric, or simple), 4 to scarlet fever, 1 to diphtheria, and not one to small-pox; in all, 59 deaths resulted from these principal zymotic diseases, against 55, 79, and 67 in the preceding three weeks. These 59 deaths were equal to an annual rate of 2·4 per 1000, which was 0·5 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had declined in the previous five weeks from 30 to 22, rose again to 27 last week, of which 14 occurred in Glasgow, 5 in Edinburgh, and 3 in Dundee. The 11 deaths from measles also showed a further decline from recent weekly numbers, and included 9 in Glasgow. The deaths referred to "fever" and diarrhœa were not only fewer than those in recent weeks, but were below the average for the season; the 6 from "fever" included 3 in Edinburgh and 2 in Leith. All the 4 deaths from scarlet fever occurred in Glasgow, and the 1 fatal case of diphtheria in Dundee. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 95 and 107 in the preceding two weeks, declined to 87 last week, and were 11 below the number returned in the corresponding week of last year. The causes of 68, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 35·0 and 31·2 per 1000 in the preceding two weeks, further declined to 25·7 in the week ending May 30th, and was lower than in any previous week of this year. During the first eight weeks of the current quarter the death-rate in the city averaged, however, no less than 31·7 per 1000, the mean rate during the same period not exceeding 20·6 in London and 18·3 in Edinburgh. The 174 deaths in Dublin last week showed a further decline of 37 from the high numbers in recent weeks, and included 13 which were referred to measles, 3 to "fever" (typhus, enteric, or simple), 3 to scarlet fever, 2 to whooping-cough, and not one either to small-pox, diphtheria, or diarrhœa. Thus, 21 deaths resulted from these principal zymotic diseases, against 34 and 33 in the preceding two weeks; these 21 deaths were equal to an annual rate of 3·1 per 1000, the rate from the same diseases last week being 3·1 in London and 2·3 in Edinburgh. The fatal cases of measles in Dublin, which had been 14 and 17 in the previous two weeks, declined to 13 last week. The deaths from "fever" and scarlet fever also showed a considerable decline from the numbers in the previous week. Five inquest cases and 6 deaths from violence were registered within the city; and 55, or nearly a third, of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline last week. The causes of 21, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Amongst the officers invalided from the Nile who embarked at Sawakin on the 30th ult. in the *Jumna* were Surgeons H. P. Birch and F. H. Treherne, of the Medical Staff.

War Office.—Army Medical Staff: Brigade Surgeon Jas. Henry Jeffcoat is granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major John Wallace is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon John Mulrenan, M.D., has been placed upon temporary half-pay on account of ill-health; Surgeon-Major Edward Hopkins is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon-Major Alexander Allan, M.D., to be Brigade Surgeon, vice William Gerard Don, M.D., granted retired pay; Surgeon-Major James Ferguson is granted retired pay, with the honorary rank of Brigade Surgeon.

Admiralty.—The following appointments have been made:—Fleet Surgeon Thomas H. Knott, to the *Oregon*; Staff Surgeon Francis R. M. Loftie, to the *Leander*; Surgeons Leonard H. Kellett and James M'C. C. Martin, additional, to the *Duke of Wellington*; Surgeon Joseph W. Whelan, to the *Indus*.

India Office.—The Queen has approved of the following promotions among the Officers of the Staff Corps and Indian Military Services made by the Governments in India:—Surgeons David Wilkie, William Edward Bonsall Moynan, M.D., Denis Peter Macdonald, M.D., Oswald Baker, Frederick William Wright, of the Bengal Medical Establishment; Surgeons William Richard Browne, M.D., Mark Robinson, Arthur Henry Leapingwell, of the Madras Medical Establishment; and Surgeon Septimus Jesse Goldsmith, of the Bombay Medical Establishment—to be Surgeons-Major. Surgeon-Major Thomas Beaumont, M.D., of the Madras Medical Establishment, to be Brigade Surgeon.

Correspondence.

"Audi alteram partem."

THE LECTURES OF WILLIAM HARVEY.

To the Editor of THE LANCET.

SIR,—Early in February of the present year you were good enough to publish an appeal from me to the medical profession to assist in the reproduction of the original MS. notes of William Harvey's lectures, delivered in the Royal College of Physicians in and after 1616. The response to the appeal shows that the subject excites considerable interest, not only on both sides of the Atlantic, but at the Antipodes. The College of Physicians at its last comitia appointed a committee, consisting of Dr. Johnson, Dr. Payne, Dr. Norman Moore, Dr. Stone, and myself, to superintend the reproduction of the lectures in autotype facsimile, and has guaranteed the cost of 100 copies. A printed transcript will be furnished with each page of the autotype; the bad handwriting, the curious phraseology, and the abbreviations used by the great physiologist rendering some interpretation necessary. The lectures contain the first suggestions of Harvey's discovery of the circulation, so that this MS. may be regarded as the most interesting monument of natural science. The number of copies to be produced will be limited to 500. Messrs. Churchill have liberally undertaken to publish the work, without the usual commission, as soon as 350 copies are subscribed for. At least 200 more subscribers are required before the work can be put in hand. Dr. Weir Mitchell of Philadelphia, who already sends the names of ten subscribers and promises more, says, energetically, that "the thing must be done." We now hope, as the College of Physicians has extended its ægis over the undertaking, that with your further kind aid we may soon be enabled to say that "it will be done."

I beg to remain, Sir, faithfully yours,

Manchester-square, May 10th, 1885. EDWARD H. SIEVEKING.

P.S.—Any communications on the subject may be addressed to me, or to Messrs. Churchill, 11, New Burlington-street, London, W. I may add that the cost of each copy, including the transcript, and bound, will be £2 2*s.* to subscribers and £2 11*s.* 6*d.* after publication.

DEATH BY HANGING.

To the Editor of THE LANCET.

SIR,—Will you allow me to say, with reference to Dr. Kinkhead's interesting paper on this subject in your issues of April 11th and 18th, that I have seen four cases of death by hanging in soldiers, two of which were suicidal and two by sentence of a general court-martial, and that, so far as I can remember, the appearances of all these were very similar. There was the same pallor or lividity of the face, the same composed expression of the countenance, and the same absence of any trace of suffering or struggle on the part of all of them. The vertebræ were neither broken nor dislocated in either of the two suicides, and I believe they were not disturbed or injured in the case that was disposed of after this fashion under my own immediate observation. I was not near enough to the other to satisfy myself on this point one way or the other; and in neither was there, so far as my memory serves, any inquiry as to whether there had been any escape of fæces or semen. I have an impression, however, that discharges of this kind are neither invariable nor uniform after death from suspension of this kind, and a good deal will depend, I think, in this, as in other conditions of the subject, on the length of the rope and the age and weight of the body.

I have seen several natives of India despatched in this way, but have kept no notes of any of them; and the younger or the lighter the victim was, the lesser proportionately was the disfiguration produced in his remains afterwards. A more composed or less disfigured corpse than that of one of those here referred to (he was a small wiry man) I have never seen. In the other body, that of a larger, heavier, and older man, the face was somewhat bloated and puffy, while the conjunctivæ were slightly bloodshot; there was no post-mortem in either case. The bodies were, indeed, carried off for interment in a neighbouring cemetery as soon as the medical officer in charge had certified as to their identity and extinction of life. I do not know if the vertebræ were broken or not, but the rope used in both these cases was not, I think, nearly so long as that mentioned by Dr. Kinkead, and it is well known that those mild-mannered oily gentlemen, the Thugs of India,[1] who had "polished off" their thousands ere they were themselves "wiped out" by Colonel Sleeman and his followers, rarely if ever injured the vertebræ of their victims. Their *modus operandi* and simple implement—a Roumalor handkerchief—are described in Sleeman's "*Rambles and Recollections of a Bengal Officer*," as well as in the more accessible pages of the late Colonel Meadows Taylor, and I saw it myself *en apparence* at the hands of one of the initiated in the gaol at Lahore several years ago. It was nothing more than a species of *garrot*, but the old practitioner has acquired an aptitude for throwing or adjusting the "cloth" such as a Roman Retiarius might envy, and the rapidity with which he twisted the fatal knot more resembled a flash of lightning than anything else I can now remember.

As to the best, speediest, or most effectual method of *taking away human life now known to science* or civilisation, a word only must here suffice. The methods at present in use are—for we need say nothing about the old Jewish, Roman, or even mediæval practices—hanging, as above, and decapitations, as in France, &c.; and the methods suggested instead of these are narcosis, poison, and electricity. Of the first, which includes Richardson's lethal chamber, we need say nothing, for the process is neither certain, uniform, nor always expeditious, and its general enforcement would require such an amount of cultured intelligence, apparatus, and preparation as might not be always obtainable. Moreover, the process is too dramatic for this our sober atmosphere. As to the poison cup, it would appear to be as repellant to our notions of right as it undoubtedly is to our conceptions of religion and reality. The idea of forcing arsenic or opium, henbane or mandragora, *nolens volens*, down the throat of a murderer, is too odious, as well as too theatrical, to be even entertained; and the hari-kari of Japan savours too much of suicide to be compatible with the requirements of Christianity. We are therefore, or so long as we retain the penalty of capital punishment, reduced to a choice of evils—to, in a word, a choice between the rope of the common hangman of the period and the great discovery of him who was called, in derision, by his contemporaries, "the dancing-master of the frogs."

We are unfortunately but too familiar with the former, while our knowledge of the latter is even now very imperfect. So far, however, as it has been tried, accidentally or otherwise, it has proved itself by far the faster as well as the "certainer" slayer of the two. It slew its man at Manchester, as well as on board the *Livadia*, in a few minutes, while its victims at Hatfield and in the Health Exhibition succumbed at once, and it has thus proved itself as painless as it is undoubtedly instantaneous. All that is wanted is to get the victim to touch the conductors with both his hands, or, failing this, so to place him as that, by a simple mechanical arrangement, these latter may enclose or impinge on two exposed parts of his person. The rest follows quick as thought, as a matter of course, and the apparatus required for the generation of this fluid or force might be packed away in an ordinary travelling trunk. It is a pity the thing is not tried, if only by way of experiment, on some of our lower congeners, whence it might be transported in time to the higher regions of Newgate and the provinces. Had such an arrangement or apparatus been available a few months ago at Galway, we should not have had to deplore the horrid fate of poor Myles Joyce, neither would we have been subsequently shocked by the tragedies that were enacted at Liverpool and Exeter; and all the other dreadful paraphernalia and accessories of the hangman's craft might be dispensed with, or, at worst, so minimised by this process as to be imperceptible to all but the inevitable officials. I am, Sir, yours obediently,

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[1] Sleeman says of these in a now utterly forgotten tract called "Ramaseeana, or the Vocabulary of the Thugs" (Calcutta, 1836, p. 27), that "no men cultivated with more care the esteem of their neighbours, or courted with more assiduity the good-will of all the constituted local authorities" than they did, and yet were they murderers on a scale such as the world has never yet witnessed in connexion with any other organisation, secret or otherwise. They were kind fathers, blameless husbands, and it is well known that they performed religious ablutions and other rites before the shrine of the Goddess Devée before they embarked upon any expedition. They scanned the face of the heavens in search of an [illegible] omen, and turned back in alarm from even [illegible]ure on sight of a jackal or other unpropitious [illegible] did, or rather do not, stand alone in these [illegible] have not hesitated to supplicate the Deity to sanction wrong or consecrate a crime; and, as Sleeman says elsewhere ("A Journey Through the Kingdom of Oude," vol. ii., p. [illegible]), "the facility with which men and women persuade themselves of a religious sanction for what they wish to do is not, unhappily, confined to any class or any creed."

Auriol-road, West Kensington, April 20th, 1885. Wm. Curran.

THE COMMERCIAL ASPECT OF THE TITLE OF "DOCTOR."

To the Editor of The Lancet.

Sir,—"The battle of the shops," as Sir Dominic Corrigan called the competition of the medical examining bodies, has had many serious consequences, but none more so than the proposal on behalf of the two Royal Colleges of England to ask for legal powers to give the title of "Doctor" to all who pass their lowest examinations. I cannot yet believe that the two Colleges will really take this step. No doubt, as you say, the title of "Doctor" has a certain commercial value. You might have added that there is a certain and very conspicuous commercial value in the power of selling this title, which has led other Corporations into temptation to use it commercially with the most disastrous consequences to their reputation. It is said that one Royal College made in one year £10,000 by this merchandise. The Royal Colleges of England have hitherto refused to have anything to do with a questionable title, whatever its commercial advantage. But now even such men as Mr. Durham and Mr. Savory are gravely proposing to try to acquire the *legal* right to grant a title, the value of which to the possessor will be in the proportion in which it conveys a false impression to the public. It is scarcely likely that Parliament will grant a title hitherto reserved for graduates of Universities, and the divorce of which from medical degrees would be a most serious discouragement to higher medical education as well a great injustice to medical graduates who to get their degrees have gone through the curriculum of a university, and through the examinations of the university, generally *in addition to* going through the examinations of the corporations. The statement that the ordeal for getting a Scotch degree is not more severe than that for gaining the qualifications of the English colleges is not relevant. To repeat it after the refutations it has received is scarcely polite. But even if it were true, it points, as so many other facts do, to another conclusion—viz., the necessity for creating a strong Medical Council that can and will enforce distinctions between examinations for mere qualifications and examinations for degrees. It is surely desirable that the English Colleges should pause before going to Parliament with a prayer so unworthy of their position and record. "Brummagem" titles are beginning to die out, and their possessors to be ashamed of them. But if they are to have a fresh lease, it surely ought not to be at the instance and prayer of the English Colleges. These Colleges never needed less the "commercial" advantage of such a trade as is understood to have been so lucrative elsewhere. I see by the latest returns that the membership of the Royal College of Surgeons of England last year, with all its legal defectiveness as a diploma, was acquired by no less than 562 persons, a number far above the reach of any other body, corporation, or university in the kingdom. The Royal College of Physicians of London exceeded itself and all other fairly comparable bodies. And now, forsooth, these honest and high-minded bodies are asked to come down to a false title business, and to go whining to Parliament representing the impending ruin of London schools. The London Schools will be very badly advised if they encourage this inadequate and undignified proposal. I admit, as a Scotch graduate, the London schools have a grievance which wants immediate redress. The London teachers want consolidation of London schools and association with a Teaching University. Let them take a leaf out of the book of Scotch professors. Let them besiege Parliament—as the Scotch professors do with so much effect, when need so requires—till the crying defect of this metropolis (a practical working university) is supplied. Then the medical schools of London will be filled, the Degrees of London will exceed those of other portions of the Empire at once in number and in value, and the high example of the London corporations, everywhere felt if not everywhere followed, will continue to preserve the profession from low purposes and false pretensions and sham titles.

I am, Sir, your obedient servant,

June 1st, 1885. M.D.

To the Editor of The Lancet.

Sir,—I do not see that your correspondent, Mr. Wright, has much legitimate cause for complaint. Doubtless, a certain commercial value generally appertains to the title of "Doctor" in Medicine. And what should qualify a man for this distinction? Not so much, I should say, two or three additional subjects in his Preliminary Arts Examination, as a sound and efficient course of medical and surgical teaching, with due *opportunities for practical* work and clinical observation, such course being terminated and the quality of the work done guaranteed, as far as possible, by *correspondingly efficient examinations.* Now, I have no doubt that Mr. Wright and his fellow graduates have had the advantages of this kind of curriculum; but I am at a loss to see how the successful candidate for the double qualification of L.R.C.P., M.R.C.S. Lond., differs from them in this respect. The medical course in each case embraces the same period of four years; with very trifling exceptions the subjects of study are equally ample, and the student at the great London schools has the advantage of the most brilliant teaching—that of men who are the *crême de la crême* of their profession—combined with the unrivalled opportunities for clinical and surgical work which a great metropolis alone affords. Respecting the "considerable extra expense" necessary to obtain a Scotch degree, I need say little. I think that all who have sought information on this point will consider that the extra cost exists only in the imagination of your correspondent. In my opinion, and probably many will agree with me, the objection to the proposed action of the Colleges has sprung from quite the wrong quarter. The injustice done, if any, by conferring the degree as suggested, would be done to men who have gone through the severe strain, the long course, and the greatly increased expense necessary to obtain a degree like that of London University. These would have real ground for objecting to the new scheme; but I think that they would have almost as much cause to complain that men like Mr. Wright and his compeers, who have experienced so comparatively easy a curriculum, should have the right with them to the *title* of M.D. According to Mr. Wright's argument, "ought not a still higher title to be granted" to those who have in reality obtained a so much higher qualification? It is, however, a very difficult matter to be entirely just to all; the most crying evils should first obtain a remedy, and it is certainly time that something should be done to protect the London students from being in any way overshadowed by those licentiates of the Scotch corporations who, with much inferior qualifications, arrogate to themselves the title of "*Doctor.*" If *some* change of the kind proposed is not brought about, probably the tendency, already marked, of students to go to those universities where a degree may be obtained at no toil and expense in excess of that required in obtaining the double London qualification, *will be* very greatly increased in the future.

I am, Sir, yours faithfully,

Westminster Hospital, June 1st, 1885. Wm. Theodore Rayne.

ON THE CONTAGIOUS DISEASES ACTS.

To the Editor of The Lancet.

Sir,—It seems to be admitted by all writers of the history of syphilis that at times the disease has taken quite an epidemic character, and really in England we seem as if endeavouring to revive these periods by the gross neglect of the most simple means of at least trying to arrest somewhat the triumphant course of the malady. There seems a tendency to mix up morality with science. Would it not be advantageous to separate them and speak of each in its proper place?—for it is difficult to treat of the prevention of venereal disease if at the same time one has to assume a high moral standard. Taking a broad view of the matter, would it not be better for those in authority to be practical and try to mitigate by prudent measures as much as possible the ills that so often accompany immorality? To begin with, one of the most simple and most easily applied means of checking their spread is the enforcement of the Contagious Diseases Acts in garrison towns and large seaports. Why this is no longer done is a mystery to most sensible and thinking men. While visiting the Royal naval sick quarters at Portland some time ago, my cousin, Mr. E. V. de Méric, Staff-Surgeon R.N., who was then in charge, kindly took me round, and on my expressing surprise that four-fifths of the beds were occupied by venereal cases, he assured me that it had been so ever since the Contagious Diseases Acts no longer gave some sort of protection to the men. If this be so in a small place like the Royal naval sick quarters at Portland, what must it be in large seaports such as Portsmouth or Plymouth? I have heard, too, that at some of our seaports, when a transport is expected, many women in hospital affected with venereal disease leave the institution in order to go and meet the ship; and what can the surgeons do? Of course, nothing. The law has decided that these women should be free from the hospital surveillance to infect these poor fellows, only just arrived in their native land, with diseases which they would take to their wives and to the towns or villages which contain their homes. With regard to the argument that is often brought forward against the compulsory detention of prostitutes, that it would be interfering with the "liberty of the subject," it seems to me the same law which deals with maniacs or small-pox patients might come into force to prevent a woman with a venereal complaint carrying devastation freely in her path without let or hindrance; excepting, of course, if the law take the high moral instead of the practical and scientific ground.

A most able and straightforward annotation in THE LANCET of Feb. 17th, 1883, after discussing the decision of the Select Committee of the House of Commons on the Contagious Diseases Act, August, 1882, not to recommend its extension, contains the following words:—"Having established the great physical and moral gain effected by these Acts, the logical outcome of the recent inquiry would be to recommend their immediate extension; but this the committee have hesitated to do in deference to the position and character of some of those who have opposed them." Now, there seems to me scarcely a doubt that if the entire question were explained simply and without any artificial varnish to those who so strenuously oppose the Contagious Diseases Acts, were it shown to them more particularly from a *medical* point of view, they would at once cease their opposition, and be the first to advocate not only the feeble way these Acts have been applied in this country, but also their extension.

The compulsory examination of prostitutes in our garrison towns and large seaports seems to me a subject that so palpably carries its own weight as only to require the energetic support of the naval and military surgeons to come again into full force. The great difficulty arises when we ask the question: Can nothing be done for London? Can anyone answer satisfactorily such a query? One feels a vague sense of helplessness in approaching it, and yet something ought to be done; the prostitution which is so rife in this vast metropolis is absolutely under no control whatever, particularly in a sanitary point of view, and it is perfectly certain that were better sanitary measures employed there would be a marked amelioration, both morally and socially, and our streets would no longer be made hideous by the scenes which now take place every night in some of the principal thoroughfares. Therefore the very first thing required in London is more hospital accommodation for venereal disease in women. Of course we have the female Lock, for which I believe funds are much needed, and all praise is naturally due to those general hospitals that have a venereal ward, although, considering the population of London, these means of receiving as in-patients women affected with syphilis bring to mind a drop in the ocean. Now, there is no use whatever to humanity in general for a prostitute to attend a hospital as an out-patient; because, as she must procure money to live, she continues her calling during the whole time of her treatment, and not only retards her own recovery, but sows the disease broadcast every night. No! What is wanted in our metropolis is a large hospital where these women would be received as in-patients and kept till at least all external signs of the disease had disappeared. Such an institution could not be supported entirely by voluntary contributions, but would have to be subsidised by the Government. For those who regard the whole question from only its moral side, it may be pointed out how many women might be reclaimed altogether from a vitiated life through the influence of the quiet and good surroundings of this institution, which might be in direct communication with the reformatories and homes for fallen women of which we hear so much. Perhaps many will say that the very women for whose treatment such a hospital would be intended would not voluntarily present themselves as patients, but I am sure every surgeon who sees out-patients in a London hospital will bear witness that the large percentage of women affected with venereal disease would only be too glad to become in-patients in a properly organised institution, and to go there on the first suspicion of the affection; so we could replace the words "compulsory examination" by those of "voluntary examination." What a boon too for medical science, as the profession would then be enabled to study more completely venereal disease in the female; at the present time there are very few chances in England of making any researches on the subject, and the opportunities for students to see a woman properly examined and the case scientifically explained are indeed few and far between. The good effects of this scheme would only be a question of time, and the benefits derived hereafter by a whole nation would, I should imagine, fully justify the expenditure of public money for its trial. But the first and most important thing is to bring the Contagious Diseases Acts into full force at our garrison towns and large seaports, which would after a time diminish by *contre-coup* the amount of venereal disease in London, being materially assisted by the palliative means of a large venereal hospital in the metropolis itself, but without which the good effects of the London institution would in a great degree be minimised.

I am, Sir, your obedient servant,
H. DE MÉRIC, M.R.C.S.,
Surgeon to the French Hospital, London.
Duke-street, S.W., May, 1885.

AURAL EXOSTOSES.

To the Editor of THE LANCET.

SIR,—In an article on "Aural Exostoses" in THE LANCET of the 30th ult., by Mr. Field, he mentions his first case as having been operated upon in 1877, and that the instrument used was a dentist's drill. May I be allowed to say that in a paper on this matter in THE LANCET of Jan. 22nd, 1876 (in which the local origin of these growths was strongly insisted on), I stated that since 1874 the method I had employed was as follows:—"It consists in grinding the bone away; and the most satisfactory appliance for this purpose I find to be the drill which is in common use among dentists. The variety of steel instruments which can be fixed to this, and the perfect command with which they can be directed, render this an especially convenient instrument."

I am, Sir, yours faithfully,
Savile-row, June, 1885. W. B. DALBY.

LIVERPOOL.

THE INFECTIOUS DISEASES HOSPITAL QUESTION.

AT an adjourned meeting of the City Council on the 20th ult., the report of the special committee appointed to consider the question of the proposed hospital for infectious diseases was read. It embodied the following recommendations:—"1. That the Council be recommended to obtain a plot of land of sufficient extent to afford hospital accommodation if required for 650 patients suffering from dangerous infectious diseases. 2. That in the opinion of this committee the requisite accommodation can be provided upon either the Green-lane site or the Edge-lane site. 3. That the Council be recommended to take the requisite steps to obtain a loan of £100,000 for the purpose of defraying the cost of such hospital accommodation and site, and that the Local Government Board be requested to cause an inquiry to be instituted as to the proposed sites, and to inform the Council which of the two is, in their opinion, the preferable one." Mr. Robert Hamilton, F.R.C.S., who had been the chairman of the special committee, regretted that he felt compelled to oppose these recommendations, and moved the following amendment:—"That the report be approved except paragraphs 1, 2, and 3; that two sites be secured at the north and south ends of the town respectively for two small district hospitals of eighty beds each; that a plot of land be secured within easy distance of the city on which to erect a convalescent home for 180 patients, thus making provision for 340 cases; and that the requisite steps be taken for obtaining a loan of £100,000 for the purpose of defraying the cost of such hospital accommodation." This amendment was carried by thirty-two to nine. The great difficulty will be to find sites sufficiently accessible to be suitable for their purpose, and also sufficiently far off from inhabited houses to avoid incurring the opposition of their owners or occupiers.

A RIDICULOUS SUPPOSITION.

The county coroner for South-west Lancashire and his deputy have recently held numerous inquests on the bodies of suicides, hanging being the mode most frequently adopted. An absurd idea prevails in and about the neighbourhood of St. Helens, where some of these cases have occurred, that it is improper to cut down the body until the police have arrived. Some months ago the deputy coroner was informed by a police inspector that in more than one case life might have probably been saved, but for the fact that the bodies had not been cut down until the police arrived, a proceeding which involved much delay, as the cases were at a considerable distance from the police station. On this occasion the deputy coroner asked the deceased's brother why he did not at once cut his brother down, and was informed that he thought it would be wrong to do it except in the presence of a police officer. When asked if he would wait for the police before rescuing any one from drowning he was silent. The deputy coroner expressed himself very strongly, and his remarks would appear to have done good; since at a recent inquest it appeared that one of the witnesses had promptly cut down the deceased in spite of the remonstrances of others present, who wished him to wait for the police.

THE NORTHERN HOSPITAL AMBULANCE.

The horse ambulance instituted in connexion with the Northern Hospital has proved so valuable as to have become a generally acknowledged necessity. The hospital is in telegraphic and telephonic communication with the central police office and district bridewells, and by arrangement ambulance messages have precedence over all others. It is greatly to be desired that all the local hospitals should each have its own ambulance, and arrangements could be easily made by means of which each hospital could have its own district. By this means accidents and urgent cases could be safely taken immediately to the nearest hospital.

THE STANLEY HOSPITAL.

When the Northern Hospital was erected, about forty years ago, it stood not far from what was then the extreme northern boundary of Liverpool, and was therefore appropriately named. Since then the borough has extended so enormously that the present northern hospital occupies a position which would be more appropriately described as central, while the Stanley Hospital, established in 1867, is, geographically speaking, the northern hospital. This hospital has recently been enlarged, a proceeding which had become necessary in consequence of the great and daily increasing number of accidents and other cases demanding admission. But before the new wings can be utilised a sum of £3000 must be raised; and to aid this very laudable object the Mayor (Mr. David Radcliffe) has opened a subscription list at the Town Hall. The hospital is doing a most excellent work; the number of patients both in and out is daily increasing; and though the times are not very favourable for such appeals, it is hoped that the sum required, which will only free the hospital from debt, will be shortly raised.

THE HOSPITAL SATURDAY FUND.

Upwards of £2500 has been raised this year by means of the Hospital Saturday boxes, cages, &c. This is a decided improvement both actually and comparatively, though scarcely such as might be expected considering the great and perfectly voluntary labours of the honorary treasurer and secretaries, aided this year by the Working Men's Committee. It is also in painful contrast to the sum of £6000 raised by the Birmingham working men for their hospitals.

A BOON TO TRAVELLERS.

Passengers to Liverpool by the London and North-Western Railway had, until recently, to undergo a terrible ordeal before reaching the terminus, in the tunnel which ran under the city from Edge-hill to Lime-street. The atmosphere was so impregnated with smoke, steam, gas, and other impurities, as to try severely the strongest chests at times, and to make it impossible for those with delicate chests to incur so serious a risk. This has now been removed by the gradual conversion of the tunnel into a cutting at an enormous cost, only a very small portion of it being left. This will conduce greatly to the comfort of the thousands of persons who are compelled to use this line, as well as to the improved health of the railway *employés*.

Liverpool, June 1st.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

THE SANITARY STATE OF NEWCASTLE.

THE twelfth annual report of our medical officer of health, Mr. H. E. Armstrong, has just been issued, and it is a searching analysis of the facts presenting themselves in every section of the important department over which Mr. Armstrong presides. The twelve months' sanitary work in this city, of which the report is a record, has been an important one. During the period in question a sanitary house-to-house inspection has been carried out. A serious epidemic of scarlet fever rose and declined; the small-pox, which attained its height in 1883, gradually faded away. The first premonitory symptoms of the pest of measles, which is now scourging our city so violently, became visible. Unfortunately the disease of measles does not figure in the schedule of the local Act by which notification to the sanitary authority is prescribed. The experience of the epidemic at present prevailing in the north of England shows that the complaint may assume a malignant form, fairly entitling it to come within the scope of municipal notification. Mr. Armstrong, as the result of a summary of an immense amount of statistics, says that 70 per cent. of the infectious diseases occurred in tenemented property, of which infected premises nearly three-fourths consisted of houses of one or two rooms each; that in upwards of 70 per cent. of the infected households the sick-rooms were not at all isolated from the rest of the house; that in 50 per cent. of such households no precautions to prevent the spread of infection were being taken at the time of the inquiry; that in only a small proportion of the cases (in scarlet fever barely 2 per cent.) was removal to hospital consented to by the patient or his friends; that a large amount of trade and processes of trade are carried on in and in immediate connexion with, infected premises, and at other places attended by persons residing upon infected premises, by all of which means infection is liable to be communicated to the public. Mr. Armstrong holds that this state of things affords proof of the necessity of ample hospital accommodation for infectious diseases; compulsory power to remove to hospital all cases of infectious diseases in tenemented dwellings, and special provision to deal with infected business premises, and to prohibit the attendance at business of *employés* residing in infected houses where means of isolation are insufficient. Amongst the curiosities of the report may be mentioned the discovery in a body, taken for dissection to the Medical College here, of the disease trichinosis, and it is believed to be the first observed in this city. Means were taken to trace the source of infection in this case, but without effect; numerous samples of pork, ham, and bacon were carefully collected from the neighbourhood in which the subject had lived, and subjected to close microscopical examination, but no trichina spiralis was found.

WHITLEY CONVALESCENT HOME.

At the late annual meeting held at the Home at Whitley, Dr. Philipson, in presenting the medical report, stated that 1336 cases had been treated; of these 1063 were medical and 273 surgical cases, and taking the whole, 1298 received benefit, or over 97 per cent. The subject of providing a children's ward had come under consideration by the committee, and overtures had been made to the Newcastle Children's Hospital, and to the trustees of the Sunderland Victoria Hall fund; nothing of a practical form had resulted.

THE LATE MR. ROUTLEDGE.

I should mention the death on May 18th of a gentleman who, although not a member of our profession, yet was well known to a large medical circle. I allude to Mr. William Routledge, dentist, of this city; he was for many years assistant to the late Mr. Sheffield of Exeter, and while at Exeter he was one of the most active members of the Exeter Literary and Philosophical Society, and held the office of treasurer for many years. So careful was he of the Society's funds, that he was named by his colleagues "Joe Hume." When he left Exeter for Newcastle the profession and the Society entertained him at a banquet and presented him with a substantial testimonial. While in Newcastle his practice as a dentist was very successful, and he enjoyed in a very great degree the confidence of our profession. Mr. Routledge, who was in his fifty-fourth year at the time of his death, was of a very kindly nature, and possessed of refined tastes. His knowledge of botany was extensive, and he has left here a very large number of scientific and general friends to regret their loss.

THE VOLUNTEER REVIEW AT GOSFORTH.

A new feature in the Volunteer review and sham fight to-day was the formation of complete bearer companies in the ambulance department, and their march past. This created much interest in the field, and the arrangements were considered very complete and satisfactory, Surgeon-Major R. F. Cook being the principal medical officer in charge.

HARROGATE BATHS AND SPAS.

Dr. Myrtle of Harrogate, who has been visiting continental spas having close affinities in composition and curative properties to those of Harrogate, writes to a local paper to say that he finds Harrogate no way behind in springs and baths to the towns he had visited, but that Harrogate possesses immense advantages in having so many spas so dissimilar in properties within a narrow circle, while some of the continental spas are separated by hundreds of miles. He points out, however, that Harrogate lacks in skilled attendants, and that at many of the continental places the patient has merely to put his dressing-gown and slippers on and walk directly to his bath already prepared for him; after it, a few steps replace him in bed. This arrangement is of immense advantage to a certain class of patients. But upon the whole, *he is* prepared to show that Harrogate offers to the great majority of invalids advantages not to be obtained elsewhere.

Newcastle-on-Tyne, May 25th.

IRELAND.

(*From our own Correspondent.*)

ROYAL COLLEGE OF SURGEONS IN IRELAND.

THE annual election of office-bearers was held last Monday, when Dr. Cameron, Vice-President, was promoted to the Presidency, and Mr. William Stokes, Professor of Surgery in the College, was elected Vice-President without opposition. For Council, twenty-one candidates competed for nineteen places, with the result that all the outgoing members were re-elected; and Mr. William Colles was re-elected Secretary to the College, a post he has now occupied for many years. This was the first time the election of office-bearers took place by means of voting-papers forwarded through the post or otherwise, so as to permit provincial Fellows to vote *in absentia*. The result, however, did not come up to general expectation, as only 143 votes were recorded out of a large constituency. The election of Dr. Cameron as President of the College requires a few words. A non-practising surgeon, in the person of Dr. Cameron, has been selected for the first time on record by the Fellows to the highest position the College can confer. It was, however, for other reasons that the selection was made. Dr. Cameron is the efficient medical officer of health for Dublin, and is one of the highest authorities on sanitary science. Independently of this, he is an excellent microscopist, a good pathologist, and by his position and talents is well qualified to hold the honourable position to which he has been unanimously elected. I may add that there is not in the city of Dublin a more general favourite among his professional brethren, or one more highly esteemed by the public, than Dr. Cameron. The election of examiners took place last week, when, consequent on the newly acquired Charter, several additional vacancies occurred. In view of the well-known conservative tendencies of the Council, it was not a matter of much surprise to learn that all the outgoing examiners, with the solitary exception of one in midwifery, had been re-elected. The election of Dr. Mapother as examiner in physiology and histology will no doubt give general satisfaction. The rule has been rigorously carried out that not more than two examiners belonging to any medical school or hospital shall be elected. There were vacancies for two examiners in the department of physics, chemistry, and medical jurisprudence, but only one was elected. At a recent meeting of the Council certain arrangements were adopted for the oral examinations, and as a result no teacher will be permitted to put questions to a candidate from his own school, nor will examiners who are teachers in the same school be allowed to examine at the same table; while in practical examinations, such as dissections, operative surgery, and clinical examinations, the same rules will be observed as in the oral. The following is the complete list of the newly elected examiners:—Anatomy and Comparative Anatomy: B. G. MacDowel, L. H. Ormsby, E. Stoker, R. L. Swan. Surgery and Surgical Pathology: C. B. Ball, H. G. Croly, E. S. O'Grady, W. Thomson. Medicine and Therapeutics: M. Boyd, R. Hayes. Materia Medica, Pharmacy, and Botany: W. Frazer, H. Minchin. Physiology and Histology: P. S. Abraham, E. D. Mapother. Physics, Chemistry, and Medical Jurisprudence: J. D. Pratt. Midwifery: J. J. Cranny, S. Mason. Ophthalmology: A. Benson, H. Swanzy. Diploma in Midwifery: Henry Croly, S. Mason, W. Roe. General Education: F. Davys, R. Morton, H. J. Tweedy.

ROYAL UNIVERSITY OF IRELAND.

At a recent meeting of the Senate, Marcus Hartog, D.Sc., Professor of Natural History, Queen's College, Cork, was elected a Fellow in the Department of the Natural Sciences, subject to the usual conditions. The Senate, at the same meeting, also resolved that credit shall not be allowed at the Second Examination in Medicine for Chemistry to any candidate who shall have passed in that subject at any examination in the Faculty of Arts after 1885. A meeting of Convocation was summoned to be held last week for the election of a representative on the Senate, and for the consideration of various notices of motion dealing with the constitution of the University. The meeting, however, fell through, one additional member being necessary to form a quorum; but it is understood that a requisition will be presented to the Senate to call another meeting. A similar misfortune occurred, if I mistake not, last year; and the circumstance is to be deplored, as on this occasion motions of considerable importance were to have been moved by Dr. Knight, Mr. Farrelly, Mr. Maguire, F.T.C.D., and Mr. Johnstone Stoney.

BELFAST ROYAL HOSPITAL.

For the past quarter there has been a falling-off in the income as compared with last year, and a decrease from Sunday collections amounting to £160. It is scarcely credible that the total amount obtained in a wealthy place like Belfast from Hospital Sunday only reached £300. There must be some reason for such apparent apathy and want of sympathy towards so valuable an institution as the Belfast Royal Hospital. The working classes, it is gratifying to state, show their appreciation of the work done by the hospital in the constantly increasing amount of their contributions; but their employers and the wealthy members of the community do not subscribe as they should. Certainly on April 30th there was a balance in favour of the hospital, but it is not improbable that before the termination of the present quarter the institution may find itself largely in debt.

Dr. O'Farrell, J.P., of Boyle, who was lately appointed a Local Government Board inspector, has been presented by his numerous friends with an address, a valuable service of plate, and a gold watch, on his departure from that town.

Dublin, June 2nd.

THE HOSPITALS ASSOCIATION.—Mr. J. L. Clifford-Smith has resigned the office of Honorary Secretary of the above Association.

PARIS.

(*From our Paris Correspondent.*)

DEATH OF DR. N. GUÉNEAU DE MUSSY.

I regret to have to report the death of Dr. Noël Guéneau de Mussy, which took place yesterday morning at his residence in Paris. He had been ailing for some time, and spent the winter in the south of France, whence he returned only on Thursday last, somewhat improved in health. He intended to resume his practice, which was very extensive, but his condition became aggravated and he expired rather unexpectedly. Dr. Guéneau de Mussy was a well-known and much-esteemed physician, and his death will be a great loss not only to the French, but also to the English and American residents of Paris. He was seventy-two years of age. He took his degree in 1839, was an Agrégé of the Faculty of Paris, Member of the Academy of Medicine, and for many years Physician to the Hôtel Dieu.

THE FUNERAL OF VICTOR HUGO.

That accidents should occur in such a great concourse of people as that brought together to witness the funeral procession of Victor Hugo was inevitable; but the number was few in proportion to the densely packed multitude that thronged the thoroughfares. There were several broken arms and legs caused by falling from trees and platforms, &c., which were erected for the occasion. There were also some cases of fainting and insolation, principally among the soldiers; this is not to be wondered at, as the weather was rather sultry, which added considerably to the fatigue of having to stand so many hours without food or drink.

The Cardinal Archbishop of Paris, whose health had much improved, has had a relapse of his bronchial affection, and his condition, which is rather critical owing to his advanced age, is causing great anxiety to his friends.

Paris, June 3rd.

VIENNA.

(*From our own Correspondent.*)

SMALL-POX IN VIENNA.

The epidemic of small-pox has been severe. In Vienna proper, strict prophylactic measures have been taken to prevent its introduction. During the month of March 414 persons were attacked by the disease in the suburbs and 282 in the city. In one week 82 persons fell ill in Vienna, of whom 20 died, 124 cases occurring in the suburbs. In the week following 76 cases of small-pox were recorded in the city, 14 ending fatally; in the suburbs 120 cases were registered. The population of Vienna amounts to 748,889; that of the suburbs to 321,564.

AMAUROSIS AFTER PARTURITION.

The following interesting case was observed by Dr. L. Königstein, in the clinique of Professor Spaeth. A woman, aged twenty-eight, was delivered of a seven-months' child on Aug. 29th, 1884. The course of the pregnancy and delivery was normal. Shortly after the expulsion of the placenta the patient fell asleep, and when she awoke, after the lapse of three hours, she was totally blind. Dr. Königstein, on examining her next day, found outwardly nothing abnormal. The pupils were enlarged almost *ad maximum*, their reaction on light and shade was very weak, and the patient could scarcely distinguish light from darkness. The ophthalmoscope showed striking paleness of the papilla and narrowing of the arteries. No medication was employed. By Aug. 31st the patient's vision had improved considerably. She could perceive movements of the hand at a distance of one metre. The field of vision was limited. No ophthalmoscopic change was observed. On Sept. 1st distinct reaction of the pupils was present. The field of vision was free. The next day the acuity of perception was normal, the arteries being somewhat distended. After the lapse of another week all was normal. The blindness consequently was caused by retinal ischæmia, which occurs but rarely in childbed, as in general uræmic amaurosis after eclampsia, or amaurosis after severe hæmorrhage occurs; but in this case the urine contained no albumen, and free hæmorrhage did not take place. Only one case similar to the above is known—namely, that observed by Weber in St. Petersburg, and published in the *Berlin. Klinische Wochenschrift* in 1873.

THE SYPHILIS BACILLUS.

Dr. S. Lustgarten recently lectured in the I. a. R. Society of Physicians on his researches on the syphilis bacillus; his statement being corroborated and somewhat widened by the experiences of Dr. Julius Fürsh and Dr. Julius Mannaberg, from the Vienna Dermatological Clinique, in connexion with a recent case of sclerosis. The sclerosis contained a large number of bacilli as it were in the form of nids.

THE APPLICATION OF PHOSPHORUS IN CASES OF RACHITIS.

Some years ago Wegner described the changes of the bones of animals caused by the ingestion of phosphorus, and hinted that this drug may perhaps play a *rôle* in the therapeutics of rachitis. Kassowitz, in Vienna, took up Wegner's idea, and not only repeated the experiments with animals, but also applied this remedy to rachitic children. As he stated at the meeting of Natural Philosophers in Freiburg, in 1883, he obtained excellent results with this remedy. Last year in Magdeburg he was already able to announce with greater certainty that phosphorus, if taken in doses of half a milligramme per diem, removed all the symptoms of rachitis. Many physicians experienced in children's diseases agreed with Kassowitz; but opponents of the treatment also arose. Baginsky, in Berlin, applying phosphorus for rachitis, observed only in 8 cases out of 72 a slight improvement; in 4 cases even a deterioration. Lorey, in Frankfort-on-Main, had 25 cases, in 7 of which the application of phosphorus produced a good effect, and in 18 the success was doubtful or altogether wanting. Professor Weiss, in Prague, had in 7 cases a negative result, and in only a single instance a positive one. Schwechten, in Berlin, observed out of 41 cases 4 recoveries and 21 improvements; 11 times phosphorus produced no effect, and 5 times it caused deterioration. Professor Monti, in Vienna, is of the same opinion.

EXPERIMENTS WITH RHODANE POTASSIUM.

The saliva contains, as is well known, rhodane potassium, and the urine combinations of it. As only little is known about its physiological and toxic qualities, Dr. Paschkis, from Professor Stricker's laboratory, made experiments with it on animals. An application of rhodane natrium or rhodane hydracid increases the reflex irritability; if applied in small quantities it causes tetanus, which is more lasting than that caused by strychnine. Rhodane potassium increases the blood pressure and irritates the terminal prolongations of the vagus in the heart. A solution of it, if dropped on the heart of the frog, produces stasis of the organ, lasting up to fifteen seconds. Paschkis employed the soda, and not the potassium salt, to exclude the effect of the potassium on the heart.

THE VIENNA UNIVERSITY.

For the forthcoming summer term 195 theoretical lectures and practical demonstrations are announced in the Faculty of Medicine, to be delivered by 121 professors, "docenten," and assistants. In the past winter term 2291 ordinary (of whom 873 were from Hungary) and 164 extraordinary students matriculated in the Faculty of Medicine. In the whole of the Faculties the number of ordinary students amounted to 5076, that of extraordinary students to 765.

Obituary.

JOHN MORE YOUNG, M.A., M.B., C.M. Glas., &c.

We have just received notice from India of the sudden death of Surgeon John More Young, I.M.D., from hydrophobia. It seems that about two months and a half before the melancholy event, while caressing a little sick dog (belonging to a brother officer), it licked his hand, on which, unfortunately, there was an open suppurating sore. The hand swelled and was painful for a day or two, but no more was thought about the matter, although the pet dog died from rabies, the result of a bite from a mad dog. Mr. Young, however, was not left long in forgetfulness, for in about two months he began to complain of great lassitude, weakness, and prostration, with dysenteric diarrhœa. About April 25th—i.e., three days before death (for up to this time he had continued his hospital duties)—intense neuralgic pains came on in his neck, which on the 26th gave place to spasms of a terrible character, and then the truth was forced upon him and all *his friends and attendants that he* was the victim of hydrophobia. He had all the well-known symptoms of that dreadful and incurable disease, and died on the 28th in the arms of Captain Reid, one of his brother officers.

Mr. Young was the most distinguished student of his year, and passed into Netley at the head of the list. In passing out of Netley, he still further distinguished himself by taking all the first prizes. He joined the I.M.D. only two years ago, and was stationed at Gorakhpore, and as a testimony to his genial, brilliant, and lovable character it may be mentioned that his brother officers are about to place a memorial tombstone over his grave.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen passed the first part of the Professional Examination (Anatomy and Physiology) for the Fellowship at a meeting of the Board of Examiners on the 28th ult.:—

Henry W. Drew, Guy's; Felix C. Vinrace, London and Birmingham; Sydney E. Holden, University College; Henry G. Lys, London; Frederic W. E. Green and Frederick W. Andrewes, St. Bartholomew's; William F. Brook, St. Thomas's.

(Candidates referred, 13.)

Passed on the 29th ult.:—

John O. Tunstall, University College; James J. Clarke, St. Mary's; Harold K. Roper, Guy's; Jasper J. Garmany, Bellevue Medical College, New York.

(Candidates referred, 8.)

The following gentlemen, having passed all the necessary examinations for the diploma, were admitted Members of the College on the 1st inst.:—

Dearden, William Francis, L.S.A., Portland House, Bolton.
Howe, Joseph Duncan, L.S.A., Stockport-road, Manchester.
Stericker, Frederick Walter, M.B. Cantab., Goodlands, Jersey.
Kidd, Hugh Cameron, L.R.C.P. Lond., Leamington-road Villas.
Carpenter, George Alfred, L.S.A., Fentiman-road, Clapham-road.

Professor John Wood, F.R.S., will commence a course of three lectures on "Hernia and its Radical Cure" on Monday, the 8th inst., at 4 o'clock precisely.

ROYAL UNIVERSITY OF IRELAND.—The following degrees were conferred at a meeting held on May 27th:—

DEGREE OF M.D.

Alexander, S., Queen's Coll., Belfast.
Barron, J., „ „
Burrows, J. R., „ „
Corry, Alex., „ „
Crawford, G. B., „ „
Curtin, M. H., „ „
Dwyer, T. W., „ Cork.
English, Robert, „ „
Foott, G. H., „ Belfast.
Foott, R. E., „ Cork.
Hannigan, M. H., Catholic Univ. Sch. of Medicine.
Hawkins, W. R., Queen's Coll., Cork.
Hennessy, Daniel, „ „
Loughrey, W. J., „ Belfast.
McAleer, J., Queen's Coll., Galway, and Catholic Univ. Sch. of Med.
McCarthy, M., Queen's Coll., Cork.
McWha, W. R., Queen's Coll., Belfast.
Marks, G. F. H., Queen's Coll., Cork.
Meenan, J., Carmichael Coll. Med.
Musgrave, J., Queen's Coll., Cork.
Nagle, James J., „ „
O'Brien, J. J., „ „
Petticrew, R., „ Belfast.
Pooler, Edward L., „ „
Ryan, J., Queen's Coll., Galway, and Catholic Univ. Sch. Med.
Savage, J. M., Queen's Coll., Belfast.
Sexton, W., „ Galway.
Sharpe, J. H., Carmichael Sch. Med.
Smyth, N., Queen's Coll., Belfast.
Thomson, Robert, „ „
Tresilian, F. J., „ Cork.
Whitty, M. J., Queen's Coll., Cork, and Catholic Univ. Sch. Med.
Wilson, S., Queen's Coll., Belfast.

DEGREE OF M.B.

Griffin, R. M., Ledwich Sch. Med.
O'Byrne, James P., Catholic Univ. Sch. Med.
Walsh, James J., Royal College of Surgeons and Ledwich Sch. Med.

DEGREE OF M.CH.

Barron, J., Queen's Coll., Belfast.
Cowden, W. J., M.D., „
Crawford, G. B., „ „
Curtin, M. H., „ „
Dwyer, T. W. „ Cork.
Foott, R. E., „ „
Hawkins, W. R., „ „
McAleer, J., Queen's Coll., Galway, and Catholic Univ. Sch. Med.
McCarthy, M., Queen's Coll. Cork.
McWha, W. B. R., „ Belfast.
Marks, G. F. H., „ Cork.
Meenan, J., Carmichael Coll. Med.
Moore, J., M.D., Queen's College, Cork.
Musgrave, J., Queen's Coll., Cork.
O'Byrne, James P., Catholic Univ. Sch. Med.
Petticrew, R., Queen's Coll. Belfast.
Pooler, E. L., „ „
Ryan, John, Queen's Coll., Galway, and Catholic Univ. Sch. Med.
Sexton, W., Queen's Coll., Galway.
Smyth, N., „ Belfast.
Thomson, R., „ „
Tresilian, F. J., „ Cork.
Walsh, James J., Royal College of Surgeons and Ledwich Sch. Med.
Whitty, M. J., Queen's Coll., Cork, and Catholic Univ. Sch. Med.

DEGREE OF MASTER OF OBSTETRICS.

Connery, M., Queen's Coll., Cork.
Corny, A., Queen's Coll., Belfast.
Hannigan, M. H., Catholic Univ. Sch. of Medicine.
Hennessy, D., Queen's Coll., Cork.
McCarthy, M., „ „
McSwiney, M., „ „
McWha, W. B. R., Queen's Coll., Belfast.
Petticrew, R., Queen's Coll., Belfast.
Ryan J., Queen's Coll., Galway, and Catholic Univ. Sch. of Medicine.
Sexton, W., Queen's Coll., Galway.
Tresilian, F. J., Queen's Coll., Cork.

This degree was also conferred upon the following gentlemen in lieu of the diploma in Obstetrics which they had heretofore obtained:—

Barter, William.
Blackall, Patrick.
Bullen John W.
Craig, James.
Cromie, Thomas.
Hosford, Benjamin.
Johnston, G. J. W.
Le Grand, William J.
Lewers, Hugh.
McKee, Samuel.
McMurray, John
McVicker, Matthew.
Mangan, Bartholomew.
Matthews, Robert Huey.
Prendergast, Joseph M.
Roulston, William.
Rutherford, William.
Sheedy, John.
Strahan John.
White, Patrick Bernard.

Honours, Exhibitions, and Prizes were awarded as follows:—

SECOND EXAMINATION IN MEDICINE.—First Class Honours: Ambrose E. J. Birmingham, Catholic University School of Medicine.—Second Class Honours: John William Wilson, Queen's College, Belfast. [illegible] Ambrose E. J. Birmingham, Catholic University School of Medicine.

DEGREE OF M.CH.—First Class Honours and Prize of £20: William J. Cowden, M.D., Queen's College, Belfast.

DEGREE OF M.A.O.—First Class Honours and Prize of £20: Frederic J. Tresilian, Queen's College, Cork.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 28th ult.:—

Beddoes, Thomas Pugh, M.R.C.S., St. Thomas's Hospital.
Carpenter, George Alfred, M.R.C.S., St. Thomas's Hospital.
Howe, Joseph Duncan, M.R.C.S., Guy's Hospital.
Jones, George Selkirk, Charing-cross Hospital.
Winckler, Wm. Joseph, M.R.C.S., University College.

The following gentleman passed his examination in Surgery and Midwifery, and received a certificate to practise:—

Oliver, Charles Pye, Charing-cross Hospital.

IT is stated that the late Mr. Richards of Wednesbury bequeathed £1000 to Walsall Hospital, and a similar sum to the West Bromwich District Hospital.

MEASLES AT CHESTER. — Measles is still very prevalent at Chester; twelve deaths were, we understand, registered last week from the disease.

THE Nottingham Corporation has, it is reported, decided, at a cost of £141,000, to purchase a number of small unhealthy tenements in the centre of the town, and to erect upon the spot a hospital, at a further expenditure of £26,000.

BROMPTON HOSPITAL FOR CONSUMPTION.—During 1884 the number of in-patients treated at this institution was 1901, against 1763 in the previous year. The number of out-patients was 13,461, against 13,314 in 1883; and the number of attendances was 72,464. The total receipts amounted to £23,852, and the expenses to £24,467.

INTERNATIONAL INVENTIONS EXHIBITION.—We have pleasure in announcing that Mr. Trendell, superintendent of the Literary Department of the Exhibition, has consulted the convenience of the representatives of the press by causing writing tables with a supply of stationery to be placed in the rooms set apart by the Executive Council.

BRITISH MEDICAL TEMPERANCE ASSOCIATION. — The annual general meeting of the above Association was held on Tuesday, the 26th ult., in the rooms of the Medical Society of London, Chandos-street. Dr. Richardson, F.R.S., presided. The annual report stated that there were now 309 members and 42 associates, the former being medical practitioners and the latter medical students, all personal abstainers. An Irish branch had been successfully established (the first annual meeting of which was held on Tuesday last), and a branch for Scotland was just being inaugurated. For the 100 guinea prize offered by the Council for the best essay on the "Physical and Moral Advantages of Total Abstinence from Intoxicating Liquors" thirty-nine essays had been received, and were now in the hands of the judges. It is intended to declare the result and present the prize at a meeting of the medical students in October next. After the usual business, Dr. Richardson made a communication on "Recoveries from Alcoholic Paralysis under Total Abstinence," and Dr. C. R. Drysdale read a paper entitled "A Medical Reply to Lord Bramwell," which was followed by a discussion.

London Hospital. — A general court of the governors of this institution was held on the 3rd inst., when it was reported that during the past three months 1967 in-patients had been attended, of whom 649 had been discharged cured, 1097 relieved, and 201 had died while under treatment. There were now 616 patients in the wards, the daily average being 620. The out-patients had numbered 7800, and 9745 minor casualties had been treated.

Training the Deaf.—The annual meeting of the subscribers to the Society for Training Teachers of the Deaf was held last week at the College, Elmhurst, Ealing, under the presidency of Major-General F. C. Cotton. The seventh annual report stated that much good had been effected in making the Society's work more widely known. The Society had occupied a room at the Technical Institution during the Health Exhibition, and the actual teaching of deaf pupils in class was exhibited day after day for over five months.

The Darwin Memorial.—The marble statue of Charles Darwin, executed by Mr. Boehm, R.A., will be unveiled in the great hall of the Natural History Museum, Cromwell-road, on Tuesday next, at 12 o'clock, when Professor Huxley, P.R.S., chairman of the Memorial Committee, will formally transfer it to the trustees of the British Museum in trust for the nation. The Prince of Wales has consented, at the request of the trustees, to act as their representative to receive the custody of the statue.

Society for Relief of Widows and Orphans of Medical Men.—The annual general meeting of this Society was held on May 20th, Sir James Paget, President, in the chair. Mr. Lee and Mr. Cooper Forster were elected Vice-Presidents; Mr. Hogg, Dr. Barker, Dr. Roberts, Dr. Broadbent, Dr. Stokes, Mr. Latham, Dr. Ogle, Dr. Duka, Mr. Bennett, and Mr. Smith Turner, Directors. From the report for 1884 it appeared that the number of members of the Society was only 366, 4 less than in 1883; 13 new members had been elected, 12 had died, and 5 had resigned. The number of widows on the books was 61, showing an increase of 4; 5 fresh cases had been assisted, and 1 widow had died. The number of orphans had been increased from 5 to 8. A sum of £2853 had been given in relief during the year, and the expenses had been £215. A sum of £220 had been invested in the Metropolitan Consolidated Stock. The usual Christmas present had been made last year to the widows and orphans receiving grants. A discussion ensued on the best means of extending the operations of the Society by increasing the number of members; of over 4000 medical men residing within the limits of the Society, only 366 at the present time availed themselves of the opportunity to make a provision for their widows and orphans. The numerous appeals in the medical journals on behalf of the widows and children of medical men who had died young and left them totally unprovided for should lead many to join the Society, by which means they could at least secure a small annual sum for those whom they would otherwise leave destitute. A vote of thanks to the editors of the medical journals for their kindness in assisting in every way in their power in making known the benefits conferred by the Society was carried unanimously, and the proceedings were closed by a vote of thanks to the chairman.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Atkinson, William, M.D.Q.U.I., M.R.C.S., has been appointed Medical Officer for the Clapham District of the Wandsworth and Clapham Union, vice M'Donogh, resigned.

Bamber, Harry, M.B., C.M.Glas., has been appointed Assistant Medical Superintendent to the Fulham Union Infirmary, vice F. G. Ingoldby, M.R.C.S., L.R.C.P., resigned.

Bennett, Storer, F.R.C.S.Eng., F.R.C.P.Lond., L.D.S.Eng., has been appointed Dental Surgeon to the Dental Hospital of London, vice S. J. Hutchinson, M.R.C.S., L.D.S., resigned.

Benthall, Alfred Elliott, F.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Southern District of the Sherborne Union, vice Turner, resigned.

Brown, Martin Luther, M.B., C.M.Ed., has been appointed Medical Officer for the Brampford Speke District of the St. Thomas Union, vice Hunt.

Crabb, James, M.A., M.D., C.M., has been appointed District Medical Officer for St. Mary, Islington.

Cuming, Charles Henry, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Southern District of the Plymouth Incorporation, vice Prynne, resigned.

Jackson, Arthur, M.B., B.A.Oxon., M.R.C.S., has been appointed Assistant Medical Officer to the Surrey County Lunatic Asylum.

Jeram, Jas. William, L.R.C.P., L.R.C.S.Ed., L.S.A.Lond., has been appointed Medical Officer for the Hambledon District of the Droxford Union, vice M'Dougall, resigned.

Lewers, A. H. N., M.B.Lond., M.R.C.P.Lond., has been appointed Assistant Obstetric Physician to the London Hospital.

Mill, William, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Halford District of the Shipston-on-Stour Union, vice Palmer, resigned.

Osborne, C. Anthony Perrier, L.R.C.P.Ed., has been appointed Medical Officer of Health for the Huntingdon Urban Sanitary District, vice Oldman, deceased.

Phillips, Sidney, M.D.Lond., M.R.C.P., has been appointed Physician to Out-patients to the Children's Hospital, Paddington-green.

Smith, Chas. Jas. Hardy, M.B.Lond., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Hawkhouse District of the Cranbrook Union, vice Hayes, resigned.

Walker, Hunter Urquhart, L.R.C.S.Ed., L.R.C.P.Ed., has been appointed Medical Officer of Health for Worksop, Nottinghamshire.

Weld, Chas. Humphrey, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Bodiham District of the Ticehurst Union, vice Hayes, resigned.

Wheeler, Daniel, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer to the Workhouse, Chelmsford Union, vice D. M. B. Wheeler, deceased.

Wood, T. Outterson, F.R.C.P.Ed., F.R.C.S.Ed., M.R.C.S., has been appointed Resident Medical Superintendent of Sussex House and Brandenburgh House Asylums, vice Dr. L. S. Forbes Winslow, resigned.

Births, Marriages, and Deaths.

BIRTHS.

Barnes.—On the 30th ult., at Boreham, near Hastings, the wife of Arthur Richard Barnes, M.B., of a daughter.

Bowman.—On the 26th ult., at Cricklewood, N.W., the wife of Richard Bowman, L.R.C.P., of a daughter.

Drew.—On the 20th ult., at Saville House, Buntingford, Hertfordshire, the wife of J. J. Bowerman Drew, L.R.C.P.S. & L.M., of a daughter.

Graham.—On the 30th ult., at Storrington, Sussex, the wife of G. H. Graham, L.R.C.P.Lond., M.R.C.S., of a daughter.

Johnson.—On the 1st inst., at Fern Lea, Upper Norwood, S.E., the wife of G. Lindsay Johnson, M.A., F.R.C.S., of a son.

Kibbler.—On the 23rd ult., at Mordaunt House, Hackney, the wife of W. Ambrose Kibbler, M.B., of a son.

Rigden.—On the 29th ult., at Burgate, Canterbury, the wife of Brian Rigden, M.R.C.S., of a daughter.

MARRIAGES.

Dickson—Carson.—On the 2nd inst., at St. Oswald's, Kilmalcolm, Renfrewshire, John Dunbar Dickson, M.D., of Marlow, Bucks, son of Henry H. Dickson, of Lansdowne-road, Dublin, to Emily Margaret, elder daughter of the late David Carson, of Glasgow.

Longman—Andrews.—On the 27th ult., at St. Michael and All Angels', North Kensington, George Philip Longman, M.R.C.S., L.R.C.P., of Donhead St. Andrew, Wilts, to Anna Louisa, widow of E. Andrews, and youngest daughter of the Rev. F. Elwes, Vicar of Gestingthorpe, Halstead, Essex.

DEATHS.

Arnott.—On the 27th ult., at his residence, Sussex-gardens, Hyde-park, James Moncrieff Arnott, F.R.S., of Chapel, Fifeshire, aged 91.

Blakeney.—On the 27th ult., at Dorking, at the residence of his youngest son, Edward Hugh Blakeney, M.D., F.R.C.S., Deputy Inspector-General, Army Medical Department, aged 76.

Bunny.—On the 2nd inst., at Newbury, Joseph Bunny, M.D., aged 86.

Cochrane.—On the 31st ult., suddenly, at Wickham Market, Suffolk, George Cochrane, M.R.C.S., L.S.A.Lond., &c., in his 77th year.

Dickson.—On the 26th ult., at South View, St. Heliers, Jersey, John Edward Dickson, M.B., C.M., in his 38th year.

Duke.—On the 30th ult., at Sevenoaks, Kent, Allen Duke, M.D., formerly of Chichester, Sussex, aged 75.

Fluker.—On the 25th ult., at Berwick-on-Tweed, Robert Carr Fluker, M.D., in his 69th year.

Holdsworth.—On the 1st inst., at Thames Ditton, Surrey, Dr. William Holdsworth, son of M. Holdsworth, Esq., of Grimsby.

Liddle.—On the 30th ult., at his residence, Bow-road, London, John Liddle, M.R.C.S., L.S.A.Lond., late Medical Officer of Health to the Board of Works for Whitechapel, aged 79.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

BOOKS ETC. RECEIVED.

Carré, Georges, Paris; Manceaux, A., Bruxelles.

Recherches sur le Microbe du Choléra Asiatique: Rapport présenté à M. le Ministre de l'Intérieur par le Dr. E. Van Ermengen. pp. 300, avec 13 Planches.

Churchill, J. & A., London.

The Pathology and Treatment of Stricture of the Urethra and Urinary Fistulæ. By Sir Henry Thompson, F.R.C.S., M.B.Lond. Fourth Edition. pp. 254, with Illustrations.

Face and Foot Deformities. By Frederick Churchill, C.M. pp. 185, with Chromos and Woodcuts.

The Regimen to be adopted in Cases of Gout. By Dr. Wilhelm Ebstein. Translated by John Scott, M.A., M.B. pp. 69.

Davis, F. A., Philadelphia.

The Oleates; an Investigation into their Nature and Action. By John V. Shoemaker, A.M., M.D. pp. 117.

Griffin, Charles, & Co., London.

A Practical Treatise on the Diseases of Women. By John Thorburn, M.D., F.R.C.P. pp. 573, with Chromo and over 200 Illustrations.

A Text-book of Human Physiology. By Dr. L. Landois. Translated from the Fourth German Edition, with Additions, by William Stirling, M.D., Sc.D. Vol. II. pp. 1184, with very numerous Illustrations.

Kegan Paul, Trench, & Co., London.

Physical Expression, its Modes and Principles. By Francis Warner, M.D. Lond., F.R.C.P. pp. 372, with 51 Illustrations. 4s.

Lewis, H. K., London.

Ambulance Lectures on Home Nursing and Hygiene. By Sam. Osborn, F.R.C.S. pp. 95, with Illustrations.

Illustrated Lectures on Ambulance Work. By R. Lawton Roberts, M.D. pp. 171.

Longmans, Green, & Co., London.

A Manual of Health Science. By Andrew Wilson, F.R.S.E., F.L.S. pp. 231, Illustrated.

The Essentials of Histology, Descriptive and Practical. By E. A. Schäfer, F.R.S. pp. 245, with numerous Illustrations.

Macmillan & Co., London.

Dickens's Dictionary of London for 1885. pp. 270. 1s.

Dickens's Dictionary of the Thames for 1885. pp. 310. 1s.

New Sydenham Society, London.

Handbook of Geographical and Historical Pathology. By Dr. August Hirsch. Vol. II.: Chronic Infective, Toxic, Parasitic, Septic, and Constitutional Diseases. Translated from the Second German Edition by Chas. Creighton, M.D. pp. 681.

Nutt, David, London.

A Brief and Practical German Grammar and Reader for the Use of Science Students. By Emil Beyer. pp. 90.

Smith, Elder, & Co., London.

Von Ziemssen's Handbook of General Therapeutics. In 7 vols. Vol. I.: Introduction by Prof. v. Ziemssen; On the Dietary of the Sick and Dietetic Methods of Treatment, by Prof. J. Bauer; On the Koumiss Cure, by Dr. Stange. Translated from the German by E. F. Willoughby, M.B.Lond. pp. 403.

The Young Doctor's Future. By E. Diver, M.D. Second Edition. pp. 142.

Swan Sonnenschein & Co., London.

Elementary Text-book of Entomology. By W. F. Kirby. pp. 240, with 87 Plates, containing over 650 figures.

Eastward-Ho. May.—Chips from a Surgeon's Workshop.—Enamel-ogenous Cysts; by A. O. Bernays, M.D. (St. Louis, Mo.)—The Tricycle in relation to Health and Recreation; by B. W. Richardson, M.D., F.R.S. (Leicester.)—Index Medicus, Vol. VII., Nos. 1, 2, 3. (Davis, Boston.)—South Hayling, a Health Resort; by Percy Pope, M.R.C.S. &c.—L'Erythroxylum Coca; par le Dr. Feigneaux.—The District Railway Guide to the International Inventions Exhibition.—Summer Tours in Scotland: Glasgow to the Highlands. (MacBrayne, Glasgow.)—Pleas for the Establishment of a Royal College of Medicine by the Amalgamation of the Royal Colleges of Physicians and Surgeons of England; by Wm. Hickman, M.B.Lond., F.R.C.S.Eng.—A Lecture on a Healthy Skin; by James Startin. (Harrison and Sons.)—Mémoire sur la Marche et l'Extension du Choléra Asiatique des Indes Orientales vers l'Occident (1873-1881); par le Dr. Mahé.—Think! a Reply to Lord Bramwell's Plea for "Drink"; by Dawson Burns, D.D.—Die spastische Spinalparalyse im Kindesalter; von Johannes Nail.—La Mortalidad de Madrid; por el Dr. D. G. G. Lemno.—Observation d'un Cas de Bec-de-lièvre compliqué de Fissure alvéolaire; par le Dr. J. M. Petit de Cette.—Good Words, Sunday Magazine, for June.—Leisure Hour, Boy's Own Paper, Girl's Own Paper, Sunday at Home, June.—Walks in Epping Forest (Illustrated); edited by Percy Lindley; 6d.

METEOROLOGICAL READINGS.

(*Taken daily at 8.30 a.m. by Steward's Instruments.*)

The Lancet Office, June 4th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
May 29	29·91	S.W.	58	54	113	68	54	·38	Cloudy
,, 30	30·08	W.	59	52	110	65	49	...	Cloudy
,, 31	30·19	S.W.	63	54	113	68	51	...	Cloudy
June 1	30·23	N.W.	58	52	109	68	51	...	Cloudy
,, 2	30·30	W.	63	56	115	79	51	...	Bright
,, 3	30·12	S.W.	66	56	116	77	54	...	Bright
,, 4	29·90	W.	74	63	128	87	59	...	Fine

Medical Diary for the ensuing Week.

Monday, June 8.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 a.m., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 p.m., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 p.m., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 p.m., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Royal College of Surgeons of England.—4 p.m. Prof. John Wood: Hernia and its Radical Cure.

Tuesday, June 9.

Guy's Hospital.—Operations, 1.30 p.m., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 p.m.

St. Thomas's Hospital.—Ophthalmic Operations, 4 p.m.; Friday, 2 p.m.

Cancer Hospital, Brompton.—Operations, 2.30 p.m.; Saturday, 2.30 p.m.

Westminster Hospital.—Operations, 3 p.m.

West London Hospital.—Operations, 2.30 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Anthropological Institute of Great Britain and Ireland.—8 p.m. Prof. A. H. Keane, B.A.: On the Lapps (A family of Lapps will be exhibited, by the kind permission of the authorities of the Alexandra Palace).—Dr. J. G. Garson: The Physical Characteristics of the Lapps.—Dr. H. Rink: The Language of the Eskimo.

Royal Medical and Chirurgical Society.—Mr. J. Bland Sutton: Fatty Tumours.—Mr. Jonathan Hutchinson: Large Lympho-Sarcomatous Tumour of the Tongue; Excision; return two years afterwards.

Wednesday, June 10.

National Orthopædic Hospital.—Operations, 10 a.m.

Middlesex Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 p.m.

St. Mary's Hospital.—Operations, 1.30 p.m. Skin Department: 9.30 a.m., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 p.m.

University College Hospital.—Operations, 2 p.m.; Saturday, 2 p.m. Skin Department: 1.45 p.m.; Saturday, 9.15 a.m.

Royal Free Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 3 to 4 p.m.

Royal College of Surgeons of England.—4 p.m. Prof. John Wood: Hernia and its Radical Cure.

British [illegible] p.m. Specimens will be shown. Dr. [illegible] Shortening of the Round Ligamen[illegible] Inversion of the Uterus.

Thursday, June 11.

St. George's Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

North-West London Hospital.—Operations, 2.30 p.m.

Friday, June 12.

St. George's Hospital.—Ophthalmic Operations, 1.30 p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 2 p.m.

Royal College of Surgeons of England.—4 p.m. Prof. John Wood: Hernia and its Radical Cure.

Saturday, June 13.

King's College Hospital.—Operations, 1 p.m.

Royal Free Hospital.—Operations, 2 p.m.

Middlesex Hospital.—Operations, 2 p.m.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of The Lancet *to be addressed "To the Publisher."*

The Church Missionary Society and Vivisection.

At a meeting of the Committee of the Church Missionary Society a letter was read from Miss A. Marston, dated 95, Onslow-square, on the subject of vivisection in its possible bearings on medical missions, strongly deprecating the practice, and appealing to the Committee to prohibit any experimentation on living animals in all schools and by all persons under their auspices and superintendence. It was resolved: "That the question of vivisection not having come practically before the Committee, they do not feel themselves called upon to give any opinion on the subject of Miss Marston's letter; but they have the *most perfect confidence in all their medical missionaries*, and feel sure that they will never permit, either directly or indirectly, any proceeding of an inhumane character to be carried on." The secretaries were directed to send a copy of this resolution to every medical missionary connected with the Society.

Gynecologist.—We believe the last American edition of Professor Lusk's work on Obstetrics and Diseases of Women and Children has been translated into French by Dr. Doléris, with a preface by Professor Pajot.

Dr. Thursfield (Shrewsbury).—*Next week, if possible.*

FATAL INJURY WITHOUT EXTERNAL MARKS.

To the Editor of The Lancet.

Sir,—The following case is perhaps sufficiently interesting to merit a place in the columns of your journal.

On March 10th last I was requested by the authorities to examine the body of a boy aged fifteen. The body presented no ecchymosis or external sign of injury. Upon opening the abdomen, a quantity of slightly sero-purulent liquid escaped. The peritoneum was everywhere highly inflamed, and thin patches of purulent lymph could easily be scraped off the bowel. On the front of the small intestine (jejunum), situated under the lower border of the last portion of the transverse part of the colon, was seen a bruise, the direction of which was longitudinal as to the bowel and transverse as to the body. This bruise was about an inch and a half in length and half an inch in breadth. Upon examining this bruised surface more particularly, a small opening was found communicating with the interior of the bowel, and, in fact, upon laying hold of the intestine a small amount of liquid fæces escaped. The other organs were all healthy.

The following is the previous history. A gentleman on horseback was passing along a road on March 8th, at 8 A.M., when this boy jumped off a wall into the road. The horse, being startled, kicked, striking the boy under the left false ribs. He immediately complained of great pain, which continued all day. No medical man saw him, but a prescription for a liniment was given, which was applied with little or no relief. He died at 11 P.M. on the Sunday night. The boy had always enjoyed excellent health. The interesting point in the case is the absence of any external mark of violence. This was specially searched for, as the history of the case was known to me before making the post-mortem examination. I am, Sir, yours obediently,

Arequipa, Peru, April, 1885. J. Dickson Hunter, M.D.Edin.

THE TIBBITS FUND.

To the Editor of The Lancet.

Sir,—Kindly allow me to acknowledge with many thanks the receipt of the following donations to the above fund.

Dr. Rayner	£5	5	0	Dr. Saul	£2	2	0
W. E. Rawstorne, Esq. ...	5	0	0	Dr. Wm. Collier	1	1	0
J. Palmer Gannon, Esq. ...	3	3	0	From "K."	1	1	0

Further donations will be thankfully received and acknowledged by Mr. Wm. Maw, Secretary to the Bradford Infirmary.

I am, Sir, yours truly,

Bradford, June 2nd, 1885. John Appleyard, F.R.C.S. & M.B.Lond.

Mr. R. de Cordova.

This gentleman, whose recitation of Gilbert's "Broken Hearts" met with well-merited appreciation before a crowded audience at Steinway Hall last week, is, we hear, a medical student who has thrown over medicine and taken to the theatrical profession. Mr. de Cordova, who is quite young, has a good flexible voice and finely cut mobile features, and he kept up the attention of his audience in a way which was most creditable in the absence of any of the ordinary stage accessories—costume, scenery, music. Mr. de Cordova has the accent of an educated gentleman, and has evidently much subtle appreciation of character.

Oil Immersion.—Frey's treatise on the Microscope is one of the best. Another, which is probably better adapted to our correspondent's requirements, is "Fol Lehrbuch der Vergleichenden Mikroskopischen Anatomie, Histologie, und Histogenie" (Leipzig, Engelmann, 1880); but the first part only is published.

THE MEDICAL COUNCIL AND GENERAL PRACTITIONERS.

To the Editor of The Lancet.

Sir,—A great deal of amusement seems to have been created at the expense of the general practitioner at the recent meetings of the General Medical Council. Surely, if for no other reason, the time is fast approaching, if it has not already arrived, when the general practitioner should be accommodated with a seat at the board of that facetious body; for if he were totally incapable of advising as to the education of the future medical student, he would at least be able to defend himself from the attacks which are now being made against him when he is not present, and therefore incapable of self-defence. If the stories of dead general practitioners are to be repeated, whether they are proven to be true or false, we may even hear of some more wonderful tales than those told at the last meeting of the General Medical Council. There is an old proverb that "people who live in glass houses should not throw stones," and it is just possible that general practitioners could tell as many amusing stories of those who frequently, from no abilities of their own, happen to occupy a position which is looked upon as being superior to that of their more lowly brethren. There is very little doubt that the general and scientific attainments and education of the general practitioner of the present day are far superior to those of even the physician of the past. I could, if I chose, relate many facts concerning the blunders of those who are at present engaged in consulting practice; but there is another proverb which hath it that "it is a foul bird, &c." If it be true that "Scotch graduates are not fitted to be good assistants," this may be one explanation why so many of them come over to this country and work for the miserable pittance which they so frequently do. From general practitioners I learnt how to diagnose small-pox, scarlet fever, measles, apply forceps, extract teeth, open an abscess, reduce a dislocation, set a fracture, pass a catheter, and a host of other things; also to show kindness and attention to the sick and dying when no physician could save them; and last, but not least, I have learnt to be kind and lenient to the weak, and to those who happen to be placed in a lower station of life than is the case of

Yours truly,

Albert S. Morton, M.R.C.S., &c.

Kennington-park, S.E., June 1st, 1885.

THE TITLE OF "DOCTOR."

To the Editor of The Lancet.

Sir,—In these days, when the bogey "red tape" is gradually vanishing before science and a clearer conception of justice, the question not unnaturally arises, so far as the medical man is concerned, What are the essentials of a Doctor of Medicine? The answer has always been: A man who has gone through a certain curriculum and passed certain examinations at a university, and attained a stated age. These, with a few exceptions, are the conditions considered necessary to become a M.D. But what for a man who has gone through a similar curriculum and passed similar examinations, perhaps even harder, but not at a university? Is he not equally learned in medicine? Then why should he be deprived of the right of using its Latin equivalent after his name? When the M.D. is supposed to be a criterion of ability of such importance, especially to a layman, surely it is a severe handicap and a moral injustice to deny this right. In the M.R.C.S.Eng. and L.R.C.P.Lond. we have a case in point. But, as you rightly observe in your leading article of the 23rd inst., many who have obtained these have passed a most insignificant preliminary in Arts. Why not, then, compromise? Let those whose preliminary has been a degree in Arts, the London University matriculation, the preliminary required for the F.R.C.S., or an equally difficult one, have the privilege granted at once; but let those whose preliminary has not been up to that standard complement it afterwards. They will then be Doctors of Medicine in fact—why not in name? If other claims to the title be needed, I think that the consideration of the better clinical teaching obtainable in London, which is one great inducement to the English student of medicine to come to the metropolis, the high fees required, and the making London to the English medical man what Edinburgh is to the Scotch, are very strong, and should at once counterbalance any prejudice that might arise from the absence of the name "university." Let all be equally dealt with, then none can complain.

I remain, Sir, yours obediently,

May 25th, 1885. Justus Sis, nec Timeas.

"DOCTORS v. PHYSICIANS."

To the Editor of THE LANCET.

SIR,—The letter of "Physician and Surgeon" in your last impression is of a somewhat aggressive character, or I should not have noticed it. In mine, under the signature of "M.D.," I had not intended to assume, nor do I think I did assume, any superiority of knowledge, leaving that to be judged of by my patients and others. I am quite ready to acknowledge that many surgeons and physicians, from experience and other causes, are the superiors in skill of some who hold the degree of M.D. in both branches of their profession, but in social status they certainly are not. A University degree is anywhere and everywhere acknowledged to give pre-eminence, and it was that feeling which induced me to take mine, residing, as I did, in a town where two others had recently done so, each prompted by a similar motive. We had all three passed our examinations long ago as surgeons and apothecaries, and were either consulting or acting officers in a provincial hospital, appointments which we all three held for many years with credit and respect. With regard to my own education, which is sneered at by "Physician and Surgeon," it consisted in the usual apprenticeship, one year of which was spent in a large county hospital, together with a clerkship and dressership at University Hospital, London. With regard to the education of the others I cannot speak, but I can as to the excellent use they made of it. Thus our degrees were certainly not taken because we had failed to reach the standard of your correspondent elsewhere. Mine was taken at the University of St. Andrews, one of the oldest in the three kingdoms, and almost the only one open to me, and my examination was a vivâ voce one, superior certainly to that of Apothecaries' Hall or the College of Surgeons, being conducted by four sets of Examiners and lasting altogether about an hour and twenty minutes, besides a series of papers to be written, occupying five hours on each of three successive days. There was also a separate vivâ voce examination in Materia Medica. So that the examination, if properly passed—and I had no reason to suppose it was not—was not quite such a farce as your correspondent would portray; and I conceived that the social standing it would give me would be higher than that I possessed before; and I should have the satisfaction of knowing that the title of "Doctor," by which I was so frequently addressed, and which is so frequently assumed without sufficient reason, would of right belong to me.

Now that I am writing on the subject, I will once and for all say what I think, and what I know many others think, of the movement which is going on to allow all medical practitioners to call themselves Doctors. The College of Surgeons bestows two titles—that of "Fellow" to those who have passed the qualifying examination, or to those who, like myself, have honourably earned it by length of service and experience, and that of "Member" to others. The College of Physicians bestows two similar titles—Fellow and Member—and, as far as I know, these are only granted to University graduates. The latter of these would justly be physicians, as in the other case of surgeons. But there is a third grade bestowed by the College of Physicians—viz., that of Licentiate, which has worried the College into granting to it what it was never entitled to, namely, the title of Physician also. Not content with this, it is now urging and persecuting the College into allowing it to assume the academical title of Doctor, which all those who have a just right to it are justly and properly opposed to. Why should it be allowed when, as I said before, it has cost those who possess it time, money, and inconvenience to obtain, all of which are to be trodden under foot and pass for nothing? "Physician and Surgeon" says there were other reasons why he did not obtain the title. Then why should it be conferred? In no other profession is a title conceded higher than that which is legally attained. As well might all barristers style themselves Queen's Counsel, or Masters of Arts style themselves Doctors. Let the College of Physicians maintain its own dignity, and do not let it give way to the clamour of those who would endeavour to assume its honours without earning them, and thus for ever depreciate them in the eyes of the world.

I am, Sir, yours faithfully,
M.D.

June 2nd, 1885.

Mr. E. Jones.—According to the statistics of M. Bertillon, the death-rates from both diphtheria and enteric fever in Paris have about doubled during the last decade.

C. J. S.—We would recommend that the matter be laid before the Local Government Board. The local authorities have behaved very shabbily, but we fear that legally they are within their rights.

VARICOCELE.

To the Editor of THE LANCET.

SIR,—It would be very interesting to know the opinion of experienced surgeons on the following points. Is varicocele usually the result of masturbation? Does it occur principally in connexion with sexual excess and involuntary emissions? Does it ever occur in a man who remains continent till twenty-five years of age? If a boy has varicocele, can any operation make him really fit for naval or medical service? I fancy that if anyone who has had varicocele be sent to India or West Africa he will break down just when most needed, though he may do for ordinary routine work. Are alcohol and sexual excess the main elements in causing varicose veins and general deficiency in elasticity of body and mind? What is the experience of army surgeons with regard to varicose veins in men reared in poverty in remote country districts, as compared with those reared in manufacturing districts and presumably more addicted to vice?—Yours truly,

QUESTIONER.

June 2nd, 1885.

COCAINE AS AN ANÆSTHETIC.

To the Editor of THE LANCET.

SIR,—I am loth to add to the numerous letters which have appeared in your valuable journal on the above subject; but, feeling that the very interesting communication by Mr. Copeland might prove misleading, I am emboldened to send you my experience of the action of cocaine upon the sensibility of the iris. In my opinion, the anæsthetic action of cocaine does not always penetrate as deeply as the iris, and I instance the following case in support thereof.

On Feb 28th, M. S——, a female aged forty-two, of calm demeanour and by no means nervous, was treated for the removal of a cataract from the right eye. A 4 per cent. solution of cocaine was applied to the eye at intervals of five minutes, and the operation commenced twenty minutes after the first application. The sclero-corneal incision was made without causing any pain; but directly the iris was seized by the iris forceps the patient started and complained of excessive pain. It was therefore deemed advisable to remove the cataract without performing iridectomy, and as the pupil was well dilated by the cocaine this was easily accomplished. By keeping the iris under the influence of atropine for a few days, and dressing the eye with cold-water compresses, the patient made an excellent recovery, and her sight was fully restored.

This case led me to decide not to use cocaine for iridectomy, unless under exceptional circumstances. The pupil generally dilates so well under the influence of cocaine that extraction without iridectomy is very easy, and, as far as I know, has not been followed by any untoward result.

Mr. Copeland's letter is incomplete in that neither the strength of the solution used nor the interval between the first application and the operation is given; it is therefore as much for the purpose of eliciting evidence on the effect of cocaine on the iris as to check the conclusion naturally drawn from Mr. Copeland's letter—viz., that when the conjunctiva is well under the influence of cocaine the deeper structures of the eye are also—that I have ventured to address to you the above remarks.

I am, Sir, your obedient servant,
WM THOS. JACKMAN, M.R.C.S.

Coggeshall, Essex, June 1st, 1885.

Bacillus.—Yes; Dr. Koch has been officially gazetted as Professor of Hygiene in the Medical Faculty of the University of Berlin.

A SUMMER ALPINE HEALTH RESORT.

To the Editor of THE LANCET.

SIR,—As there are many people by whom a salubrious and agreeable summer residence on the south side of the Alps is much desired, I am anxious to bring a very lovely and healthy locality under the notice of your readers—viz., the Hôtel Belvedere, Lanzo d'Intelvi, Como. The situation of the hotel is one of the most beautiful to be found anywhere. It stands at an elevation of fully 3000 feet above the level of the sea, with a magnificent view of Monte Rosa and its adjacent range, while at a depth of 2400 feet lies the Lake of Lugano, winding away in the distance. Behind the hotel stretches a fine old forest of chestnut trees, containing some of the grandest specimens of that tree to be found in Europe. In the forest, in addition to the chestnuts and interspersed among them, are to be seen many other kinds of trees, such as oak, elm, beech, birch, sycamore, hazel, lime, ash, tamarind, maple, walnut, and thorn. There are many delightful walks on the level, and donkeys are to be hired at the hotel. Monte Generoso, or Calvagione, is within easy reach for a day's excursion. Near Lanzo, and within a short distance of the hotel, are sulphur and iron springs. The climate is equable, with a soft yet bracing air, the temperature ranging from 61° to 73°. The subsoil is sandy and the atmosphere dry. The Hôtel Belvedere can be reached by carriage in three hours and a half from the following points:—Argegno on Lake Como, Osteno and Maroggia on Lake Lugano, the latter being a station on the St. Gothard Railway. The hotel, which is large and roomy, has been recently fitted up with every comfort, and has a billiard room and library, with a good lawn-tennis ground near the house. In the immediate neighbourhood are two dairies, by means of which the milk cure can be carried out. An English Church (S.P.G.) has been built, and there is a resident chaplain during the months of July and August, as also a resident physician. The hotel is a telegraph station. Being a comparatively new health resort, it is not yet mentioned in Baedeker, but this is to be rectified in the next edition.—I am, Sir, yours faithfully,

CHARLES SPURWAY, M.R.C.S.Eng., &c.

Rome, May, 1885.

Mr. A. J. Harvey's paper on the "Discovery of Self-Mesmerism" is declined.

THE DEGREE OF B.Sc. OF THE LONDON UNIVERSITY.

To the Editor of THE LANCET.

SIR,—Will you allow me to suggest, after reading the article in THE LANCET of this week on the Preliminary Scientific (M.B.) Examination, that, having regard to the amount of scientific knowledge men who have passed the Intermediate (M.B.) Examination possess, it would, to use the words of the article, be "both politic and fair" if the University of London awarded them the degree of B.Sc. Why should medical students have to pass four examinations before obtaining the honour of a degree when in all the other faculties only three are required, and when, after having passed their third examination, they are quite on a par with the inferior degree men in those other faculties? Simple justice demands that this honour should be extended to Intermediate (M.B.) men.

I remain, Sir, your obedient servant,
C. L.

May 22nd, 1885.

A CASE OF CATALEPSY.

To the Editor of THE LANCET.

SIR,—Judging by the text-books, cases of catalepsy are sufficiently rare to warrant my publishing this one.

Daniel L——, aged fifteen years, was admitted into the Mallow Union Hospital on March 27th, 1885. His pulse, temperature, and urine were normal; pupils equal; no paralysis; eyes staring. He would not answer any question or make any attempt to feed himself. He continued in the same state till April 1st, when, on taking up his wrist to feel the pulse, I noticed that it remained in the same position in which I left it. I then tested the arms and legs, and found them perfectly cataleptic. On April 2nd I again tested the limbs; they were still cataleptic. Next day he was not so rigid, and had some voluntary power. I was informed that he had spoken, but not coherently, to his grandmother on the previous evening. With Dr. Berry's assistance, I applied galvanism from the spine to the arm and the leg. After a short time he shrank away, and dropped the limbs which we had elevated. On April 4th his mother came to see him. She stated that on the night of March 22nd he awoke in a fright. He was not living with her, but was at service with a farmer at the time. She saw him on the 24th, when he spoke to her, but seemed "queer." There is no history of anything odd in the family. On this date (April 4th) I raised both arms and one leg at the same time and left the patient in that position for fifteen minutes. The arms remained up, but the leg dropped partially after some time. I again applied galvanism to the spine and the leg. He at once tried to roll away from me. From April 4th to the 8th he remained in the same condition, but on the latter day, on my raising his arms, he dropped them at once; he had, however, some voluntary power of movement. On the 11th he ate bread out of his own hand for the first time. On the following day he got up without help to the night-chair, ate all his own bread, and stole and consumed that of the patient next to him. He talked to the ward attendant, but would not answer when I spoke to him. From this date to April 17th he remained in an idiotic state, when he was sent to the idiot ward. His intellect, however, subsequently improved, and on May 21st he answered questions rationally, and will, I think, soon be able to return home.—I am, Sir, yours obediently,

FRANCIS W. GREENE, M.B. Univ. Dub.,
May 25th, 1885. Medical Officer, Mallow Union Hospital, co. Cork.

Mr. Holderness.—Such a consultation, though theoretically simple, is practically unsatisfactory, and to be avoided. Our correspondent would be justified in declining it; but we see no objection to his undertaking the charge of the case if the patient wishes it.

MINCING MACHINES.

To the Editor of THE LANCET.

SIR,—A few days ago I bought a mincing machine for use in the kitchen, and on looking into its construction I found that the working parts were made of lead. The machine consists essentially of a hollow cylinder of enamelled iron, in which there revolves a horizontal axle provided with a series of teeth which force the meat against the edges of a row of knife-blades set in a casting of lead. The axle and its teeth are all of lead. Is there any danger of lead-poisoning from the use of such a machine? The makers state in their advertisement that 80,000 of them have been sold; therefore the danger, if there is any, is a matter of some public importance. I am, Sir, yours truly,

Hatfield, May 18th, 1885. R. HUGHES.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Russell Reynolds, London; Dr. Sieveking, London; Mr. J. C. Richardson, Wandsworth; Mr. Van Stow, London; Dr. Finlay, London; Dr. Ward Cousins, Southsea; Mr. G. E. Walker, Liverpool; Dr. Duncan Main, Hang Chow; Dr. Gairdner, Glasgow; Dr. More, Rothwell; Mr. W. T. Rayne, London; Mr. Ormsby, London; Dr. Gramshaw, Gravesend; Mr. Apperly, London; Mr. Tomlinson; Mr. J. D. Farquharson, Newcastle-on-Tyne; Dr. Hudson, Leeds; Mr. H. E. Richardson, Birkenhead; Mrs. M. E. Bache, London; Dr. Sinclair Thomson, London; Messrs. Burroughs and Wellcome; Messrs. Herren, Kahnemann, and Krause, Vienna; Mr. McGregor Robertson, Glasgow; Dr. Campbell, Garlands; Dr. Dolan, Halifax; Mr. Cosburn, Newbury; Dr. Swete, Droitwich; Messrs. Griffin and Co., London; Dr. P. W. Macdonald, Dorset; Mr. Blackett, London; Dr. Cruise, Dublin; Dr. Savage, Birmingham; Mr. W. Bull, London; Messrs. Manlove and Co., Notts; Mr. J. G. Elliott, London; Mr. S. Knight, London; Mr. Dalby, London; Mr. Ridgway, Bristol; Mr. White, Manchester; Mr. A. S. Morton, London; Mr. Simeon Snell, Sheffield; Mr. Grinlynn, Burton-on-Trent; Dr. Hannay, Shrewsbury; Mr. Myers, Hull; Dr. Corfield, London; Messrs. Robertson and Scott, Edinburgh; Messrs. E. Smith and Co., London; Dr. Macnamara; Mr. Canall, London; Mr. Blore, Leeds; Mr. Bigmore, Avrill; Messrs. Kirby and Co.; Messrs. Mackay, Edinburgh; Mr. Tillyeld, Notts; Dr. Spender, Bath; Messrs. Foster and Co., Clapham; Mr. Gurner, London; Mr. Owen, Lepton; Mr. Smith, Liverpool; Mrs. Pratt, Cardiff; Dr. Gledhill, Manchester; Mr. Baker, York; Mr. Kershaw, London; Messrs. Oppenheimer and Co., London; Mr. Berry, Wrexham; Messrs. Richardson and Co., Leicester; Mr. Shand, Peterboro'; Messrs. Lee and Martin, Birmingham; Mr. Barrow, Birmingham; Miss Yeatman, Haslemere; Mr. J. Startin, London; Mr. Coates; Mr. Tomlinson; Questioner; M.D., St. And.; An Old Schoolmaster; Vindex; A.B.Dub.; Medicus, Edinburgh; P.; W. A. W.; Doctor, Plymouth; M.B., Liverpool; F.; H. E., New-cross; G. A. C., Clerkenwell; M.D.Lond.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Crewe; Messrs. Oliver and Co., Manchester; Mr. Heap, Swanage; Mr. Wells, London; Mr. Davenport, London; Mr. Davies, Bath; Mr. Anderson, Llandudno; Mr. Irving, Stanmore; Messrs. Goddard and Massey, Notts; Mr. Emmenson, Rotherham; Mrs. Abbs, Dewsbury; Dr. B. Squire, London; Rev. A. T. Sole, Southampton; Mr. Thompson, Wolston; Mr. Fasken, Isle of Skye; Mrs. Lockwood, Bournemouth; Messrs. Gale and Co., London; Dr. Royle, Jersey; Mr. Hulme, Birmingham; Mr. Trent, Fulham; Mr. Symons, Dumfries; Mr. Fidler, St. Helens; Dr. Dodsworth, Chiswick; Mr. Longman, Sherborne; Mr. Pollock, Wallingford; Mr. Pace, Newcastle-on-Tyne; Mr. Parson, Godalming; Mr. Tweddles, West Hartlepool; Mr. Wade, Kingston-on-Thames; Mr. Townsend, Exeter; Messrs. MacLehose and Son, Glasgow; Mr. Burcombe, Lincoln; Dr. Duckworth; Messrs. Mason and Co., Chelsea; Mr. Grisewood, Liverpool; Mr. Robson, South Shields; Dr. Dowe, Fife; Mr. Bodage; Dr. Heelas, Bonchurch; Mr. Keswick, Sutley Ashfield; Mr. Meadows, Leicester; Mr. White, Manchester; Mr. Robinson, Bury St. Edmunds; Mr. Eccles, Newcastle-on-Tyne; Mr. Bullock, London; Mr. Gabriel, Notting-hill; Mrs. Griffith, London; Mrs. Montague, London; Messrs. Beal and Co., Brighton; Mr. McDowell, Tipperary; H. O. M., Edinburgh; M. C.; J. C., Liverpool; C. T. K.; B.D., Llanfachreth; E. C. F.; J. G. W. B., Folkestone; F.S.A., Wye; Speranza; Medico; V. J. R.; Medicus, Southport; G. R.; Medicus, Muxton; A. G.; X.; C. P. T.; J. H., Liverpool; L.R.C.P., Manchester; G., Balham; Medicus, Stow-on-the-Wold; J. M.; Alpha Omega, Durham; W. R., Festiniog; Omega; M.R.C.S.; Alpha, Croydon; M.R.C.S., Earthingboro'; M.R.C.S., York; Locum Tenens, Manchester; J. B.; M.R.C.P.; A. P.; J. M., Hereford; Alpha, Carnforth; L. J.; C. S.

Church of England Temperance Chronicle, Newmarket Journal, Oxford University Gazette, Bath Herald, Galloway Advertiser, Retford News, Stratford Express, Nottingham Daily Express, St. James's Gazette, Christian Million, Animal World, Good Company, Morningside Mirror, Christian World, Musical Times, &c., have been received.

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The Cavendish Lecture

ON

HYSTERIA AND ITS COUNTERFEIT PRESENTMENTS.

Delivered before the West-London Medico-Chirurgical Society on Friday, June 5th, 1885,

BY J. S. BRISTOWE, M.D., LL.D., F.R.S.

MR. PRESIDENT AND GENTLEMEN,—It has often happened to me, when I have determined to speak or write on some special subject with which I had thought I was familiar, that, as I have pondered upon it with the object of bringing my facts and fancies into due mutual relation so that I might place them in the form of a compact and intelligible picture before my auditors or my readers, I have found my task grow more and more difficult with thinking upon it; I have found matters which I had perhaps hastily clothed with importance dwindle into insignificance; I have found what had seemed incidental and subsidiary questions assuming fundamental importance and pressing for solution; and I have discovered that, if I wanted to deal with my subject intelligently and adequately, I should have to bestow much more contemplation upon it than I had originally intended, and to treat it on different principles from those which suggested themselves to my mind in the first instance.

So it proved on the present occasion. It would be an easy matter, I thought, when I decided on the title of my lecture, to collect out of my experience a series of cases of hysteria and a parallel series which were not hysterical, to compare them, and to consider the lessons which such a comparison might teach. But as I proceeded with my self-imposed task, and began to bring into mental juxtaposition cases which I had regarded as hysterical and cases which I had regarded as not hysterical, I was compelled to ask myself more definitely than I had ever done before what were my grounds for applying the epithet "hysterical" to certain cases and for withholding it from certain other cases. I pondered over the matter; I puzzled myself; I came to conclusions that did not satisfy me; and at length, having wasted much time over it, I decided, after all, to treat my subject from the superficial point of view from which I had at first regarded it, and to reserve what little I had to say upon its more abstruse aspects for the close of my lecture.

I shall not attempt, then, at the present moment to define hysteria, or to consider in what respects hysterical disorders of the nervous system differ from other functional nervous derangements, or how they may be distinguished clinically from these and other groups of symptoms due to structural disease of the nervous centres, or of the nerves. But I shall assume, as is generally admitted, that hysteria represents an unstable condition of the nervous functions, arising independently of organic changes in the nervous system; in which at one time or another one or other part, or several parts, of the nervous organism may be temporarily affected in *various* ways; but in regard to which, partly from the conditions under which the symptoms of the disease arise, partly from the emotional state which is generally present, and partly from peculiarities in the symptoms themselves, in their mutual relations and in their course, there is, as a general rule, little difficulty in diagnosis. And I proceed to describe a selection of cases which, on the grounds above-stated, I have reasons to regard as hysterical, and to compare them generally, or in some of their most striking symptoms, with cases which, so far as I know, would not generally be placed in that category.

1. Mary D——, an emotional girl, nineteen years of age, was under my care for two or three months in the latter part of 1882. She was suffering from hysterical aphonia; besides which she presented a slight external squint of the left eye, and a narrowing of the left palpebral fissure and of the left side of the mouth, associated with a little twitching in the facial muscles of the same side. The aphonia was of recent origin, but no history could be obtained with regard to the affection of the face and eye. No material improvement took place. She came under my care a second time towards the end of 1883. She was still aphonic, and still presented her old facial peculiarities, but she was suffering from vomiting and emaciation, and from hysterical fits attended with much violence of convulsions. She was subjected to the Weir-Mitchell method of treatment, and at the end of three months left the hospital much improved, excepting in the symptoms for which she was originally admitted. On November 21st, 1884, she became my patient for the third time. She had remained aphonic, but suddenly, some three weeks before admission, had lost the power of articulation as well. She was still a very emotional young lady, with slight external squint of the left eye, a little narrowing of the left palpebral fissure (which Mr. Nettleship considered to be due to partial ptosis), some narrowing of the left side of the mouth associated with constant twitching of the angle, and a fidgety manner. She could not phonate, excepting a little when she laughed or coughed, neither could she articulate; indeed, when asked to speak, she merely moved her lips vaguely, as though not comprehending how to adapt them to the utterance of articulate language, but there was no paralysis of the larynx or of the mouth or tongue. Dr. Semon found that the vocal cords moved with the utmost freedom, that they often came into close juxtaposition, and that sometimes when apparently efforts were being made to phonate the rima glottidis became obliterated. The lips and tongue and soft palate, for all purposes but speech, were completely under her control. But though she could not speak, she understood what was said, and she could answer readily in writing. In addition to the above symptoms, it was discovered that she had anæsthesia throughout the left side (head, neck, arm, trunk, and leg), that she could neither taste nor feel with the left side of the tongue, that she could not smell with the left nostril, and that the perception of colours with the left eye was imperfect. There was complete absence of sensation and of reflex excitability in the soft palate and pharynx. The left ovarian region was tender. No very marked change occurred for some time. There was a little variation in the degree and distribution of the hemianæsthesia; and on one occasion, under the influence of a powerful magnet, there was temporary partial transference. I showed her and taught her how by smacking her lips, by similar action of her tongue, and by breathing through her upper row of teeth when resting on her lower lip, she could utter the essential consonantal sounds of *p*, *t*, and *f* respectively, but she made no further advance towards speech. She suffered much and constantly from headache, and occasionally from sickness; and early in January had a severe hysterical fit, in which she was violently convulsed and very rigid, but remained sensible. It ended in a fit of crying. After this she complained very much of headache and sickness, seemed ill, and ultimately took to her bed. She appeared still to be suffering thus when suddenly, late in the evening of March 10th, she called out "Sister," and at once the floodgates of her speech were opened, and she talked so volubly and incessantly that she had to be removed to a small ward for the night. From this time she improved rapidly, in nearly all respects. Her headache and vomiting gradually ceased. She became bright and cheerful, and useful in the ward, and looked and conducted herself like a sensible girl. But the paralytic phenomena on the left side of the face remained unchanged; and she was still anæsthetic, void of taste and smell, and partially colour-blind when, early in April, she was sent to a convalescent hospital.

Unfortunately, the history of the case does not end here; for, three or four weeks afterwards, she was brought back to the hospital with recurrence of aphonia and aphemia and, additionally, with somewhat severe general chorea. It will be recollected that on former occasions her manner had been fidgety, but her movements were not then characteristic, they were rather sudden and impulsive. But now they were typically choreic, and involved not merely the limbs, but the trunk, the head and neck, the face, the eyes, and the tongue. It was stated that the return of symptoms was due to her having been suddenly roused from sleep by one of her fellow-convalescents. She had never, so far as I know, had chorea previously; she had never had rheumatism; and no evidence of cardiac disease was ever detected. Within the last few weeks she has again suddenly regained speech and voice; but she is still under treatment for the chorea, which is improving, and for the anæsthesia and paralysis.

Now, that the above is essentially a case of hysteria will be generally allowed. The emotional character of the girl; the aphonia corresponding accurately with the aphonia, so often observed in hysteria; the hemianæsthesia, with involvement of the senses of smell, taste, and sight on the same side; the ovarian tenderness; the characteristic fits; and the rapid and unexpected variations in the symptoms—all furnish evidence of the correctness of that view. But was the aphemia also hysterical? Is the chorea hysterical? Are the persistent paralytic or spasmodic phenomena on the left side of the face hysterical?

That the aphemia was functional, and presumably therefore hysterical, cannot, I think, be doubted. The history of the case shows it. But aphemia is rare as an item of hysteria. At any rate, I have only once before met with it in a definite form; while aphonia is common. And yet when one considers the nature of the nervous disturbances by which aphonia and aphemia are respectively caused, and the close functional relationship there is between these two factors of speech, it seems odd that aphemia should not be a more common outcome of hysteria, and more often associated with hysterical aphonia than it is. It has been shown in this case, as I believe it has been shown in many other such cases, that there was no paralysis of the vocal cords, which could be brought into the most complete apposition, and into the position therefore in which phonation could not have been helped had the patient managed to breathe forcibly at the suitable moment. The defect was a hinderance to the proper transmission of the mental impulses to phonate to the ministerial centre by means of which the complex group of actions which subserve phonation are automatically coördinated, or a failure of this centre to act, or an impediment to the passage of the duly coördinated impulses along its efferent nerves. It has been shown also that there was no real paralysis of the organs of articulation. She understood speech, she could write, she could read, she was at no loss for words; but her organs of articulation, though free to move, did not respond to her mental impulses to speak. In fact in this case, as in the last, the defect depended not on any default of the supreme centre, but on some incompetence in a subordinate coördinating centre, or on some impediment to the transmission of impulses either between the supreme centre of speech and this coördinating centre, or between the last and the muscles it should control. That the nervous defect was in both cases independent of any structural change in the parts concerned, and involved simply what may be termed a hitch in the mechanism by which articulation and phonation are effected, is proved by the sudden temporary cures of the aphonia under the influence of galvanism, and the suddenness of onset and the suddenness of disappearance of both affections. The only other case of hysterical aphemia which I can recall is as follows:—A gentleman, about fifty-five years of age, with whom I was well acquainted, had been liable for many years to occasional fits, determined by mental excitement, which every doctor who had seen him in them regarded as hysterical, and which, from the description given to me, I thought were undoubtedly hysterical. On the occasion to which I refer there had been a serious panic on the Stock Exchange, and for some time it had been doubtful whether, through defaulting debtors, he would not lose a very large portion of his fortune. The excitement induced one of his so-called "hysterical" attacks, and this was followed for the first and only time by a total loss of the power of uttering articulate language, which lasted for several hours, and was then suddenly recovered from. He had no paralysis at the time, was quite sensible, could understand well all that was said to him, and could express himself accurately in writing.

But the same affection of speech may result from organic disease, implicating the centre or tracts of nerve tissue, presumably disturbed functionally in the cases just quoted. In 1870 I brought before the Clinical Society a very interesting case of the kind. The steward of a steam-packet was attacked suddenly while passing through the Straits of Banca, with a series of severe epileptic fits; on his emergence from which his limbs were powerless, he was stone deaf, and he could not speak. He was taken shortly afterwards to the hospital at Singapore, and was then still deaf and unable to speak, and paralysed on the left side. There was also slight right hemiplegia. He remained in hospital for some months, improved in many respects, and then came to England. He was received into St. Thomas's immediately on his arrival in this country, and just nine months after the onset of his illness. At this time he had manifest weakness in the left leg, complained of pain at the back of the head, and was unable to utter any articulate sound. But he had no paralysis of the organs of speech, he could understand perfectly, and he could keep up a conversation in writing. He had recovered his hearing and was also fairly well in all other respects. It was obvious that his inability to speak depended neither upon paralysis of the organs of speech nor on affection of the supreme centre of speech; but was due to some interference with the transmission of the impulses to speak from the supreme centre either towards or through the centre which regulates the mechanical details of speech. He had been speechless for nine months, and was no nearer speaking now than he was at the beginning of his illness. But he was a sensible man and (as I before mentioned) had complete control over the organs of speech for all other purposes than those of speech; and I determined therefore to endeavour to teach him to speak. I pointed out to my class and to him that the utterance of articulate sounds is a mere mechanical art; that for each letter-sound the organs of speech have to be arranged in a particular manner, and that if thus arranged, and their owner breathes or phonates, or suddenly opens or closes the oral passage, as the case may be, he cannot help uttering the articulate sound due to the particular arrangement of the parts at the time. And I illustrated my meaning by showing him, as I showed Mary D——, how, by certain simple manœuvres, certain simple consonantal sounds—such as those of *p*, *t*, and *f*—could be uttered; and how, by accompanying these several acts with phonation, *p*, *t*, and *f* become converted respectively into *b*, *d*, and *v*. I will not occupy your time by detailing how I, by repeated and progressive lessons, and he, by persistent and determined efforts, succeeded at the end of some weeks in restoring to him the use of articulate language. It is sufficient for me to say, that I first showed him how to utter the simplest articulate sounds; that, then, I taught him how to combine sounds; and that, after he had laboriously made some progress in these accomplishments, and especially after he had acquired some facility in combining two or three letters, his further progress was marvellous in its rapidity. I have quoted this as a case of aphemia dependent on organic cerebral disease; and judging from the patient's history and from the accompanying symptoms, I believe it was. But I admit that the complete recovery which took place is to some extent an argument in favour of the functional nature of his disorder.

Is the chorea which has latterly appeared in my patient to be regarded as hysterical? I do not think it has yet been proved that chorea is due to organic disease of the brain; and we know that (although it presents remarkable relations with heart disease, rheumatism, and scarlet fever) it is largely characterised by emotional disturbance often not unlike that met with in hysteria, and that hemianæsthesia and other symptoms not uncommon in hysteria occasionally become developed during its course. Considering how often rhythmical and convulsive movements of various kinds (some of which would certainly in former times have been called chorea) attend hysteria, it would seem not unlikely that symptoms identical with those of chorea should occasionally supervene as a part of the hysterical programme. A case bearing on this subject that was under my care three years ago has recently been published by my friend Dr. Hadden in *Brain*. In substance it is as follows:—A boy fifteen years of age was on December 20th attacked with a kind of fit, attended, it was said, with faintness, sickness, and convulsions. Similar fits recurred several times during the day, and from that time choreic symptoms showed themselves. On January 16th he was brought to the hospital, and in the casualty-room he was attacked with another fit, in which he became rigid, with convulsive movements of the arms and legs; but he was conscious, emotional, and cried when questions were put to him. His mother said that before the fit came on he complained of tightness at the throat and inability to swallow. When he came to, he was received into the general hospital, and was found to present characteristic general choreic symptoms with difficulty of speech. There was no cardiac disease. On Jan. 22nd he complained of a lump in the throat, jumped up, and would have fallen out of bed if he had not been caught. He rolled over on his face, sobbing. When turned over again his back became rigid and his limbs convulsed. He did not lose consciousness; he had no recurrence of fits; his chorea gradually subsided, and he was discharged well on Jan. 31st. The fits were in this case, I think, clearly hysterical; they seem to have ushered in the choreic symptoms, and they recurred from time to time during the progress of the disease. I cannot venture to assert that the chorea was in this case a phase of hysteria; but I think that this case, in association with that first narrated, and the fact of the emotional affinities between the two affections, render this view at any rate a probable one.

I now come to the paralytic state of the left internal rectus, and the peculiar condition of the muscles supplied by the left portio dura. The paralysis of the rectus was incomplete, but it was obvious, and she saw double. The left palpebral fissure was narrower than the right. The left oral angle was the more pointed, and that half of the mouth opened less widely than the other. Moreover, as I have pointed out, there was always a little twitching of this angle of the mouth, and of the muscles on the same side of the face. The condition of things was not unlike what results from an old attack of facial paralysis, in which recovery only short of perfection has taken place; the muscles regaining their voluntary power but becoming somewhat contracted and liable to flickering spasms. Mr. Nettleship was inclined to regard the narrowing of the palpebral fissure as due to slight ptosis. At any rate it is clear that the facial phenomena were due to affection in the domain of the third nerve and that of the portio dura.

We never got a very complete history of the case. But in the history we obtained there was nothing to show that she had ever had any acute affection of the portio dura, or that the squint and double vision were of old date. One argument against the functional origin of the phenomena is that since they were first observed they have presented no variation whatever; such as they were when she was first seen, so they remain. That hysterical patients may suffer from functional squinting I suppose there is no doubt. Within the last few days I have seen a young widow lady of twenty-five, who during the last month has for the first time in her life been suffering from the ordinary form of hysteria. But she informed me that during the previous ten years she had suffered from paralysis, at one time of one limb, at one time of another, and from loss of feeling, and that several years ago she suffered for some months from a squint and double vision for which she was treated by an oculist. She had no headache or sickness at the time. In relation to this question, I will also refer very briefly to two interesting cases admitted under my care within a few days of one another in the winter of 1882-83.

Eliza H——, a girl of nineteen, was attacked suddenly fourteen weeks before with right facial palsy, and six weeks later with weakness and numbness of the left arm and leg, the leg being affected later and less severely than the arm. She had no fit, headache, giddiness, or sickness. She had never had any serious illness before, nor had she been hysterical. On admission she was a plump and remarkably healthy-looking girl. The paralysis of the right side of the face involved mainly its lower part. She could wrinkle her forehead slightly, and could close her eye, but not firmly. The mouth was drawn over in the most remarkable way to the left side. It was almost wholly to the left of the mesial line, and the left angle was tucked up under her fat cheek so as to be scarcely visible. When she laughed the zygomatici on the right side acted slightly. There was very slight weakness remaining in the left leg. The arm, however, was decidedly weak. There was no anæsthesia. The optic discs were normal, and there was no evidence of disease in any other organ of the body.

Gertrude H——, a girl aged fifteen, after suffering for about a week with headache and giddiness, suddenly, a month before admission, began to squint, and three weeks later began to complain of weakness, numbness, and tingling in the right arm. She, like the other, was a plump healthy-looking girl. She had paralysis of both external recti, mainly of the left, with double vision, and impairment of sensation with marked loss of power in the right arm. She complained also of left-sided headache and some giddiness. The optic discs were healthy, and there was no sign of disease elsewhere. I may add that she, like her contemporary, presented a clean bill of health, and there was no evidence of her ever having displayed the usual symptoms of hysteria.

I need scarcely say that these two girls coming into hospital at the same time, and presenting a striking resemblance to one another in their histories and in their symptoms, attracted a good deal of clinical interest. And naturally, amongst others, the question arose whether their symptoms could be hysterical. I did not take this view of the cases; but you shall judge how far their future histories justify it. The former of these patients gradually but slowly improved. The paralysis of the arm and leg disappeared absolutely in the course of two or three months. The facial palsy made less rapid progress. It had improved by the end of three months, at which time the affected muscles presented the reactions of degeneration. She has called upon me from time to time since; and when I saw her a month or two ago, she was perfectly well, but for a trace of asymmetry in the lower part of the face. The latter patient has been under my care off and on down to the present time, and her symptoms have slowly progressed. She has suffered from variable headache, giddiness, and sickness ever since; the paralysis of the right arm and leg have become almost absolute, and hemianæsthesia of the same side has supervened; paralysis has spread to all her external ocular muscles, and complete ophthalmoplegia externa has resulted; and she has become liable to periodic epileptic seizures, always ushered in by two or three days of increasing high temperature. She has never had any trace of optic neuritis, and remains mentally in perfect health. I do not give the full details of this case partly because for my present purpose it is needless, and partly because I intend before long to publish it together with some other cases of the same kind. Now, were these cases hysterical? I am much more inclined than I was at first to think that this view furnishes the explanation of the former case, but I confess that I am by no means clear on the point. With respect to the latter case, I may state that I recently transferred it to another hospital, and the sister of the ward and the house-physician there settled between them to their own satisfaction that the case was hysterical, and that the girl was malingering. That she is not a malingerer I am absolutely certain. Whether the case can be regarded as hysterical depends on the limits one assigns to hysteria. I have reasons for believing that no organic changes will be found in the nervous centres after death. But the continuous progress of the case from worse to worse, and many of the special symptoms that are present, are not characteristic or even suggestive of hysteria. I do not think that these two cases are, in any sense, conclusive with respect to the question they have been adduced to illustrate; but I submit that my cases collectively point to the possibility of local paralysis being at times of functional origin, and, if of functional origin, occasionally, at any rate, hysterical.

To return to the subject of hysterical defects of speech. It is not only aphonia and aphemia which are met with in hysteria. The following case shows that we may have both stammering and aphasia. Two or three years since a lady, thirty-two years of age, consulted me. Many things, needless to recapitulate, had conspired during the previous eight or ten years of her life to make her emotional and to induce hysteria. About two years before I saw her she had an attack of "gastric fever." She was ill for a long time, and when convalescent became insensible for several days, and presented symptoms somewhat like those she consulted me for. Again three months ago she was ill for three weeks with symptoms of the same kind. Her present attack was of a month's duration, and was getting worse. Her condition was very peculiar. Women rarely stammer, and she was not an habitual stammerer. But now she stammered so badly that it was difficult to understand her. Her stammering moreover was odd. She began by repeating a word or two many times, then, perhaps similarly repeated one word and then the initial letter of the word, thus: "I think, I think, I think," then "I, I, I," then "think, think, think," and then the consonantal sound represented by *th*. Accompanying the stammering were rapidly repeated distortions of the face. These involved both sides, but were most severe on the right. The muscles of the eyelids twitched incessantly until the eyes were nearly closed. The corners of the mouth were similarly affected; and the other facial muscles, but in a less degree. The convulsive movements extended even to the muscles of the neck. She had difficulty in writing. Slowly and with deep consideration she could generally manage to translate printed words into written words. But when she tried to express her thoughts in writing she soon began to make hopeless blunders, and to repeat letters; nor could she succeed in writing her name. She could not recollect the forms of the letters she wished to use, nor could she recall their names. I tried to make her perform simple sums in addition, but she could not do it, and the figures were meaningless hieroglyphics to her. She said she could not read anything so as to understand it; that for the most part she knew the words which were actually under her eyes, but always when she reached any one word she had quite forgotten those that preceded it, and hence could not catch the meaning of even the shortest sentence. She could name anything she saw, but had great difficulty in recalling the names of things which were not present or visible. I saw her again about nine months later. I learnt then that all her symptoms had disappeared in the course of a few months, but that they had recently returned. She had had recurrence of stammering, but that was not present now. She presented, however, all the old spasmodic twitching of the facial muscles, all the old difficulty in writing and in the recognition of letters, and all the old forgetfulness of names of things not before her. She could not recollect the name of the day or of the month, and she told me that a few days previously she had had, as she thought, a serious and interesting conversation with a lady whom she knew, and who called upon her next day and asked her if she had not been ill, for she had talked nothing but nonsense. The patient had occasional attacks of unconsciousness, which, for anything I know to the contrary, may have been either attacks of syncope or epileptic seizures. I have no sufficient reason, however, for doubting that the case was essentially one of hysteria; and that was, I believe, the view of the medical man under whose charge she was.

(*To be concluded*).

REMARKS UPON THE

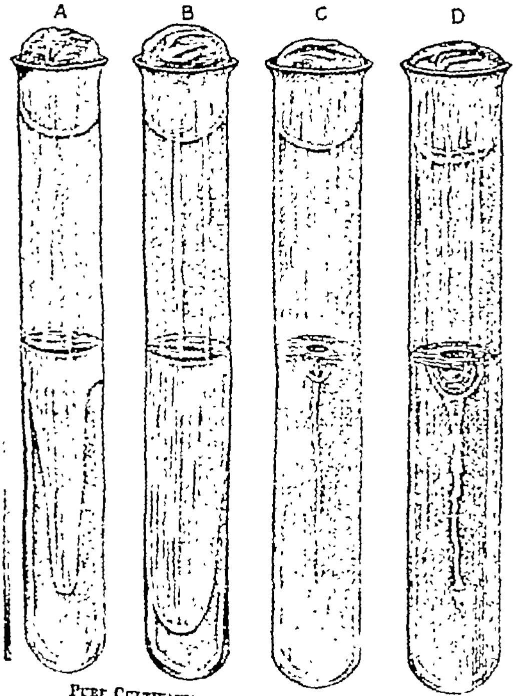
CHOLERA BACILLUS OF KOCH.

BY EDGAR M. CROOKSHANK, M.B.LOND.

THE works of Koch and his collaborators, of Hueppe, Johne, Babes, and others, have made us acquainted with the most recent and trustworthy methods of bacteriological research, which are of such especial importance in enabling us to decide the burning question of the present day—the etiology of Asiatic cholera. The interest in the discovery by Koch of a cholera bacillus, and in his methods of its investigation, is increased by the approach of summer and the possibility of a fresh outbreak in Europe. Consequently the attention of the profession and of the scientific world has been drawn to this subject throughout Germany, Italy, Spain, and France—in fact, almost everywhere; while this interest especially finds expression in America in the demands in the medical journals for a thorough acquaintance with scientific bacterioscopy, and in this country in the recent discussion at the Royal Medical and Chirurgical Society. The result of this discussion, however, though convincing to those who know how to appreciate the importance of the arguments brought forward by Watson Cheyne, Heron, and Warden, is in several respects very unsatisfactory, more especially for those who do not fully realise the minute and searching methods employed in bacteriological research by the school of Koch, and in the face of contradictory opinions the medical public remains without any guide. Having through the kindness of Professor Virchow shared the bacteriological laboratory of Dr. Babes in the Pathological Institute of Berlin, and for some time almost entirely restricted my attention to the study of comma bacilli, it is my aim in these remarks, by describing in the simplest form possible the methods employed, to enable all to judge for themselves, and, I trust, not only to appreciate, but to be convinced of, the searching arguments brought forward by Koch to prove the essential *rôle* of this micro-organism in the causation of the disease, and to be provided with a practical and sure means of diagnosing true Asiatic cholera. By reference also to some of the most recent researches, and by commenting upon some of the points raised at the above-mentioned debate, one can clear up many difficulties which lie in the way of accepting the conclusions of Koch. Those who are acquainted with Koch's comma bacillus can easily demonstrate its presence in the intestine in all cases of true cholera. Hitherto nearly one thousand cases have been examined by capable observers, and have given positive results; and there does not exist one observation which is contradictory, nor can one find the same microbe in other maladies. Physicians can therefore accept the presence of the comma bacillus of Koch as a pathognomonic sign of cholera, and in so doing it is an essential part of one's duty to become acquainted with its nature. The character of the comma bacillus is manifested in its habitat, its form, its cultivation, and its pathological action. The morphological characteristics have been fully described in the writings of Koch and in the reports of the Berlin Cholera Conferences, and need not be repeated; but inasmuch as it is often difficult to distinguish other bacilli which are present in the ejecta from the bowels and resemble it more or less in microscopical appearance, it is most essential to become familiar with the methods of pure culture which have been employed by Koch.

It is necessary, however, to obtain a characteristic culture, always to employ a 10 per cent. gelatine, slightly alkaline (Babes), and as it is difficult to prepare, it would be best to procure it ready made. Provided, then, with ready prepared sterilised tubes, a platinum needle (two or three inches of fine platinum wire fixed at the end of a glass rod), a few dinner- and soup-plates, half a dozen small panes of glass (6 in. by 4), a solution of sublimate (1 in 1000), a common dinner knife, some potatoes, methyl violet, a microscope, and its usual appendages, the medical man (especially the medical officer of health), who has not access to the elaborate apparatus of a bacteriological laboratory, has all that is required for conducting the simple methods which Koch often had recourse to and employed with success in India. For the plate cultures improvise a damp chamber by utilising a common dinner plate and a soup plate, both previously washed with sublimate, the plate having a piece of filter paper laid upon it, which is also moistened with sublimate. A small plate of glass, sterilised by carefully heating one surface over a spirit lamp, is placed on the filter paper, as level as possible, with the sterilised surface uppermost. Prepare two such chambers, then liquefy the gelatine-peptone broth in two tubes, and introduce into one by means of the platinum needle a mucous flake from choleraic discharge, and stir it well up; from this inoculate the second tube by introducing the needle five times, and stirring round as before. Lastly, pour the gelatine out on the plates in the form of a ring, so that every part can be brought into the field of the microscope. At a temperature of from 16° to 20° C. little specks commence to be visible in about twenty-four hours. They consist of isolated colonies, and when examined with a low power and a small diaphragm have the following characteristics. They appear as little masses, granular, and slightly yellow, *and of a* faintly yellowish-red tinge. They liquefy the gelatine, sink down, making a little excavation, at the bottom of which one recognises the little punctiform colony. By means of the platinum needle, with the extremity bent into a miniature hook, one can, under the low power of the microscope, select and pick out a typical colony and *inoculate* a tube. Another colony can be selected in the same way and well spread out with a needle on a cover glass, and stained after the method of Babes. This consists in putting on the cover glass so prepared a drop of a weak aqueous solution of methyl violet (B) and leaving it for a minute; then place the cover glass on a slide, and with *filter paper* remove the excess of liquid, and examine. A rapid examination is thus made of a pure culture of the bacilli. In about twenty-four hours the tube-culture commences to display its absolutely distinctive appearance. Liquefaction sets in slowly, commencing at the top of the needle tract around an en*closed bubble of air, and forming a funnel* continuous with the lower part of the needle tract, which preserves for several days its resemblance to a white thread (Fig. C, D). In about eight days, however, this too is liquefied, with the exception of the deepest part of the needle tract, which disappears only at the moment when all the rest of the gelatine underneath it is liquefied. Babes has shown that the cultivation on an oblique surface of agar-agar peptone-broth is also quite characteristic. By inoculating the surface vertically with the needle, in about two days a culture is developed in the form of a plate, semi-transparent, and with well-defined margin, while the liquid which exists at the bottom of the oblique surface becomes milky. If one compares this with *the behaviour* under similar circumstances of other comma bacilli, the difference is in all cases easily appreciated. The potatoes are prepared by removing eyes and rotten spots, well washing, soaking in sublimate for half an hour, and then steaming for the same length of time. Holding them, with the fingers previously dipped in sublimate, they are cut in two with a knife which has been sterilised by heating in the flame of a spirit lamp, then placed in damp chambers extemporised as before, and inoculated by smearing the micro-organisms over the surface with the flat of the knife. Koch's comma bacillus will only grow at the temperature of the blood (37° C.), forming a slight brown transparent layer.

If, on the other hand, we are dealing with a case of cholera nostras, we shall by the same procedure produce the characteristic biological appearances of the Finkler bacillus. In the tube culture we find that the gelatine in two or three days is liquefied along the whole tract of the needle puncture, excavating the gelatine in the form of a conical sac, and resembling in some degree the finger of a glove turned inside out (Figs. A and B). In glass plate cultures the colonies have a slightly yellowish-brown colour; but they are larger and rounder than the colonies of Koch's bacillus, have a well-defined border, and under a higher magnifying power a distinctly granular appearance. They liquefy the gelatine much more quickly, and give rise to a penetrating odour and rapidly become irregular in shape. Even in two or three days the gelatine on the second plate with only a few colonies is altogether liquefied. On agar the Finkler bacillus forms a white layer much more quickly; the liquid at the bottom of the oblique surface also becomes milky, but after a certain time a brown, coffee-coloured layer appears, which is very characteristic. On potatoes the Finkler bacillus grows rapidly at the ordinary temperature of the air, the culture has a brownish colour with a whitish border, and the surface of the potatoes appears to be eaten in.



PURE CULTIVATIONS IN GELATINE-PEPTONE-BROTH.
A. Finkler's bacillus, twenty-four hours old.
B. " " two days old.
C. Koch's cholera bacillus, twenty-four hours old.
D. " " " two days old.

Other comma bacilli differ in that they cannot be cultivated on gelatine, with the exception of a comma bacillus very frequently found in water. This liquefies gelatine very slowly, and forms on its surface a white pellicle (Babes). The last link in the chain of evidence is afforded by the effect of the inoculation of a pure culture of Koch's comma bacillus in animals. Nicati, Rietsch, Koch, Ermengen, and Babes have inoculated the bacilli with success in the duodenum. Babes, who used all practical antiseptic precautions, had three successful cases out of six; the guinea-pigs, which were the animals experimented upon, exhibited at the post-mortem examination the appearances produced by cholera without any trace whatever of peritonitis or putrid infection. In the intestine, in the mucus typical comma bacilli were found and pure cultivations obtained. Recently it is reported that Koch, by a new method, without forming any lesion, has produced choleraic symptoms, without exception, in a great number of animals. Koch and Babes have also studied the pathological appearances produced by the cholera bacillus. They have found in all cases, more or less, in the intestine that the epithelium to a great extent is missing, the superficial tissue necrosed, the glands dilated, their epithelium swollen, in the glands and sometimes in the inflamed tissue more deeply, and in the necrosed parts they have established the presence of the micro-organism. In internal organs of chronic cases affected with parenchymatous degeneration, round or oval bacteria are sometimes seen; they are also pathogenic (Babes), but these latter are not in any way characteristic of cholera, but are considered to be merely the result of septic complication.

From these investigations we are led to the following conclusions:—That the presence of the cholera bacillus of Koch is quite characteristic of cholera; that the comma bacilli of Koch exist in the tissue of the intestine; that they are, there is every reason to believe, the actual *causa causans* of cholera. With regard to the second statement, one can only conclude that if observers have failed and do fail to find the bacilli in the tissues, it must be that either they are not masters of the technique, or that they have not sufficiently sought for them. The method employed by Babes is to cut very thin sections of a recent case of cholera, if possible immediately after death, and especially from the immediate neighbourhood of a Peyer's patch. Then leave the sections for twenty-four hours in a watery solution of fuchsin (fabrique de Bale), wash a little in sublimate (1 in 1000), pass rapidly through alcohol and oil of cloves, thoroughly dry with filter paper, and preserve in Canada balsam. From material supplied by a case examined by Babes in Paris I have also succeeded, by closely following his method, in staining the bacilli in the tissue and demonstrating their presence with a Zeiss $\frac{1}{12}$ oil immersion lens. With regard to the inoculation of animals with cholera bacillus, one must confess that it is not easy to avoid peritonitis or accidental infection, but it is easy to be convinced that if one does avoid these errors one will have a certain number of cases which give positive results. That Dr. Klein has so often encountered accidental infection may account for his want of success. Emmerich has asserted that he has found in the internal organs a special microbe which causes choleraic symptoms by inoculation. This, however, is in direct contradiction to all other observers, who have shown, like Babes, that if there be a pathogenic microbe present in the organs, it has penetrated through the necrosed tissue of the intestine, and that it is nothing more nor less than a pyogenic or septicæmic bacterium.

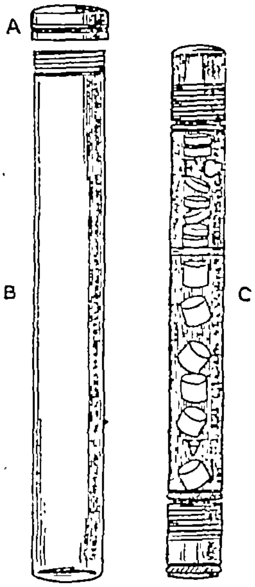
FERROCYANIC TEST PELLETS FOR ALBUMEN.

BY F. W. PAVY, M.D., F.R.S.

THESE pellets afford a ready, portable, reliable, and delicate clinical test for albumen. They require no spirit lamp to be employed and supply information which can be accepted without needing the application of any other test for correction or corroboration. When albumen is present it does not fail to be indicated by the production of a precipitate; and, on the other hand, when a precipitate is produced albumen, as far as I yet know, is the only principle that occurs in the urine to occasion it. With these qualities the ferrocyanic test commends itself as specially adapted for general use in medical practice.

The sketch on the following page shows the portable character of what is needed for the application of the test. The whole appliance can be carried in the pocket like a pencil case, which it only to a trifling extent exceeds in size. There is a celluloid tube (C) for holding the pellets, and this fits into a glass tube (B), which is employed as the test tube. No heat being required for the application of the test permits the glass tube to be made of sufficient thickness to be carried in the pocket without danger of breaking. The celluloid tube has a partition inside to keep the acid and ferrocyanide pellets separate, and at either end there is a screw top. The glass tube is provided with a metal cap (A), which screws on and closes it. Messrs. Maw, Son, and Thompson of Aldersgate-street make the apparatus.

Under the form of acetic acid and ferrocyanide of potassium, the ferrocyanic test has for a long time been favourably regarded as a delicate test for albumen. Senator, in his recently published monograph on albuminuria, in referring to the drawbacks belonging to heat and nitric acid, speaks thus[1] of the test:—"As, however, notwithstanding these drawbacks, the test in question [heat and nitric or acetic acid] is the only one in common use, it will not be superfluous to give a brief account of far more reliable tests which should be used in doubtful cases, or I would rather say, in all cases in future. These are as follows: (1) To acidify the urine with acetic acid and then add carefully a (concentrated) solution of ferrocyanide of potassium, according to Hofmeister the most delicate of all the tests for albumen, and which precipitates all the albuminous bodies, but not peptone." To adapt the ferrocyanic test conveniently for clinical use, it occurred to me to follow what I had already done as regards the cupric test for sugar, and bring it into the pellet form. At first I placed the acid (citric) and ferrocyanide in the same pellet, and these pellets were introduced to the notice of the profession at the Clinical Society in the early part of 1883. Subsequently, for reasons that presented themselves as experience was gained with the employment of the test, the agents were placed in separate pellets, and it is in this form that I now recommend it. As the pellets are devoid of any foreign principle whatever, there is nothing to undergo deterioration by keeping. Citric acid is just as eligible for the purpose required as acetic acid. Enough is supplied in the pellet to secure the presence of free acid in any alkaline specimen of urine that is likely to be come across, provided the quantity mentioned in the instructions for the application of the test is taken. Should any doubt exist, two pellets can be used in place of one. The ferrocyanide pellet consists of the sodium instead of the potassium salt, on account of its yielding a looser and more speedily soluble product. The pellets are made by Mr. Cooper of 66, Oxford-street.



In using the test about a drachm of urine is taken as the quantity to be employed. An acid pellet is dropped into it, and with a little agitation is found to be quickly dissolved. One of the ferrocyanide pellets is next dropped in, and the urine again shaken to facilitate solution. If albumen is present, a precipitate immediately appears.

It is necessary that the test should be used in the manner which has been mentioned—that is, the acid pellet must be first dropped in and dissolved, and then the ferrocyanide pellet added. The latter pellet it is which supplies the information required, and if a precipitate is by this pellet produced, the conclusion may be drawn that albumen is present, for the test does not precipitate peptones or other principles incidentally present in the urine. For sensitiveness the ferrocyanic will bear comparison with any other albumen test; and should no precipitate be rendered visible it may be safely inferred that no albumen is present. There is no need therefore for anything beyond the *test itself* being employed, and no spirit lamp being required, gives it a great advantage.

It occasionally happens that a precipitate is produced by the acid pellet alone, but no fallacy should arise from this. It is the ferrocyanide pellet which affords the evidence of the presence or absence of albumen. The acid pellet only supplies a preparatory condition to allow the ferrocyanide to act, and does not constitute the test. The usual source of the precipitate referred to is uric acid, and by diluting the urine with about an equal bulk of water, it is prevented from appearing. In this way the interference thus occasioned to the application of the test is removed. Mucin also is precipitated by an acid, and the best plan here is to take two test tubes and to treat the urine in one with the acid pellet alone, and in the other with both pellets. A comparison of the two will show whether albumen is present or not.

Should the urine be turbid from lithates, it may be cleared either by the application of moderate warmth, or, what may be more convenient, the addition of about an equal bulk of hot water.

A most portable little case is made by Jahncke of Canonbury Works, Dorset-street, Essex-road, N., which contains the two kinds of pellets for albumen, the cupric test pellets for sugar, a spirit lamp, test tube, and urinometer. This gives all that is required for the ordinary examination of the urine, and makes an elegant, compact, and convenient little case.

Grosvenor-street, W.

THE ETIOLOGY OF GOITRE IN ENGLAND[1]

BY W. N. THURSFIELD, M.D.

As a rule the subjects which are brought for discussion before the Society of Medical Officers of Health relate either to matters connected with sanitary administration, or to infectious disease, or to influences acknowledged *to directly* affect the health of the community. As goitre may not at first sight appear to belong to either of these classes, it may be as well for me to state that my attention was first directly drawn to this subject about three years ago, in consequence of my being requested by a sanitary authority to inquire into an epidemic prevalence of goitre amongst the children in some schools in their district. The undoubted epidemic nature of the disease and other facts were so diametrically opposed to the etiological views almost universally given in the text-books on medicine, that I was induced to make further investigations as to the general liabilities of the population and physical characteristics of certain districts where goitre was endemic, and, in order to *avoid hasty generalisation* from general conditions, which may have been merely coincidences, to check these observations by particular inquiries in individual cases, wherever opportunity offered.

I have restricted my conclusions as to the cause of goitre *to the disease as it occurs in England, because* I wish to confine myself as far as practicable to personal experience, and there may be in other countries contributing causes of which I have no knowledge. It would, for instance, be interesting to know why in India goitre should be nearly as *common in men as in women.*

For a definition of goitre I do not think I can do better than follow the official nomenclature of the Royal College of Physicians, which defines goitre as "enlargement of the thyroid gland, endemic in certain mountainous districts, but *not limited to them.*" This enlargement depends upon simple expansion, hypertrophy of tissue, or vesicular distension, or a combination of all three, and results from persistent abnormal increase in the blood in the gland, or persistent abnormal call upon the physical action of the gland, and usually upon both combined. Goitre is much more prevalent amongst females than males, and certainly in my experience affects in undue proportion the industrial class. The primary causes of goitre are as follows: (1) Climatic, (2) physiological (including sex, heredity, &c.), (3) industrial, (4) dietetic, (5) neurotic and strumous diathesis.

In localities where goitre is endemic two of the above causes are always present, and generally three or four, in various degrees of preponderance, and the preponderating cause will often be found to differ in different localities. Sporadic cases of goitre occurring in localities where goitre is not endemic, when not directly imported, are the result of the preponderating influence of some one or two of the above causes, probably conjoined in many instances with the influence of heredity. The causes are mentioned in the order it will be most convenient to *consider* them. I have not referred to absence of sun light, confined atmosphere, and other causes considered as contributing in some countries, as these are not in my experience concerned in producing English goitre.

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[1] Sydenham Society's Translation, 1884, p. 11.

[1] Paper read before the Society of Medical Officers of Health, May 15th, 1885.

The Climatic Influence.—This is as a rule the chief factor in the production of endemic goitre. Endemic goitre may elsewhere exist in low-lying plains, due doubtless to the combination of some of the causes above alluded to; but in England, so far as my experience goes, the endemic prevalence of goitre is not found at much less altitude than is indicated by a fall in the column of mercury equal to about three-quarters of an inch. This diminished atmospheric pressure in hilly districts, together with the climbing of hills and other conditions leading to sudden alterations in the circulation, combined with the natural distensile property of the thyroid, is, I believe, the origin of the goitrous diathesis. In the goitrous districts abnormal enlargement of the thyroid occurs at any age up to adult life. At the present moment I could show cases at almost any age from infancy upwards. It appears, however, usually to show itself from five to twelve years of age, perhaps most commonly at about eight years of age; but where medical advice is sought, it is not generally until a marked enlargement coincides with the first catamenial period or some other cause interfering with the circulation. It is this circumstance, I think, which has given rise to the statement found in most text-books that it is at the above period that goitre usually makes its first appearance. It is my experience that a much larger proportion of cases of enlargement of the thyroid in a goitrous district will be found in females under the age of thirteen than above it. The enlargement in the majority of cases then disappears; in some, however, it is persistent and increases much, and it is these cases which are ordinarily known as goitre. This persistence is owing to causes specially interfering with the circulation of the thyroid or otherwise conducive to hypertrophy of the gland. The cause most directly conducive is, however, diminished pressure of the atmosphere.

The Physiological Influence.—Of the thyroid gland little is definitely known beyond its anatomical structure, which is that of a very vascular ductless gland, with a dual supply of bloodvessels and nerves from different sources. The thyroid has this peculiarity, that of all the glands of the body which we can see and feel it is most prone and most capable of alteration in volume, and it is to this peculiarity that goitre is due. It is, in fact, the giving way under varying degrees of increased force below, or diminished pressure above of the point of least resistance in the human body externally. In other words, the abnormal and persistent expansion of a structure normally distensile for physiological reasons. I have no personal information on the point, but it is stated that goitrous tumours increase in size in wet weather—i.e., with a low barometer; and a locality with a high local humidity might in the same way be a contributing influence. The function of the thyroid in the human body appears to be of a double nature—one almost mechanical, the other physiological. One purpose served by the thyroid appears to be to act as a diverticulum for the circulation on the occurrence of arterial tension in the brain or uterus. That it should so act in the case of the intercranial circulation might be anticipated from the very intimate anatomical relation between the arterial supply to both, and cases have been recorded of acute goitre supervening on intense excitement. This function or habit of the thyroid has much to do, as will be presently shown, in the production of goitre. That it does so act in the case of the uterus is also an observed fact, sudden enlargement of the thyroid frequently supervening in connexion with menstruation and pregnancy, and in some cases a periodical expansion occurs. As no direct anatomical connexion between the uterus and the thyroid is traceable, we are driven to the explanation of correlation of nerve influence between the two organs. That intimate sympathy exists between the generative organs and those of the throat is obvious from well-known facts; and the liability of sudden enlargement of the thyroid to follow uterine excitement appears to have been utilised for practical purposes both in classical and mediæval times. This function or habit of the thyroid would account for the greater liability of the female to suffer from enlarged thyroid. The thyroid is at all ages normally proportionately larger in the female than in the male; and the fact, as I have observed, that the preponderance of cases of enlarged thyroid amongst females is found, though perhaps not to the same extent, in childhood as in adult life, is evidence that this special liability is not, as has been suggested, owing to the greater use of water as a beverage by females, but is a liability of the sex, and doubtless the result of a natural provision for equalising the sudden alterations in the circulation to which females are specially liable.

As regards the function of the glandular apparatus of the thyroid (the vesicles, &c.), little is known definitely. Physiologists seem generally to agree that the gland performs some office in connexion with the composition of the blood. Dr. Baber frequently found the vesicles to contain red blood-corpuscles in various stages of degeneration and decolourisation, and concluded that the gland was concerned in the retro-transformation and excretion of the elements of the red blood-corpuscles. This assumption, if correct, has a most important bearing, and may help to throw light upon the mysterious but undoubted occasional connexion between the use of certain drinking waters and the production of goitre, and will be referred to subsequently in connexion with that point. Goitre has a most decidedly hereditary tendency. I have seen many such cases both direct and collateral. It has been suggested by Dr. Woakes, on analogical grounds, that this hereditary tendency would be most marked where there was a strumous taint, inducing goitre by abnormal relaxation of the arteries of the gland, the result of neurosis of the cervical ganglia. The cases, however, in which I have noticed heredity have generally been of a high physical standard of development, and of an average intellectual standard.

The Industrial Influence.—That goitre is frequently entitled to be considered an industrial disease I entertain no manner of doubt whatever. Carrying weights on the head or otherwise, so as to interfere with the cerebral circulation, is a most potent contributing cause. It requires, however, to be combined with the climatic or some of the other influences alluded to, and even in goitrous districts I have obtained strong evidence that for the industrial influence to be operative it is necessary as a rule that it should commence at or soon after puberty. I am well acquainted with two populous localities both situated at an altitude of about seven hundred feet. In both goitre used to be endemic, and is so to some extent at the present time. In both the water-supply is the same as it has been from time immemorial; in both there has been a most marked diminution in the number of cases of goitre, especially of the more severe kinds, and the only alteration in the habits or liabilities of the inhabitants which could at all affect this has been the cessation on the part of the young females of the locality of the habit of carrying weights on the head in their employment in connexion with the coal and ironstone mines, also their daily water-supply, &c.; as having acquired the ability to readily carry weights on their heads, they adopted that mode of carrying everything. The present generation of females in the locality, not having had a similar education, carry water &c. in the ordinary way. Of one of these localities I have intimate knowledge, and well remember as a boy passing through the streets to have frequently noticed the repulsive looking huge goitrous tumours of a kind one seldom, if ever, sees now. At the present time the alteration is most marked and is at once admitted by the older inhabitants. This district is a mining and manufacturing one, more flourishing years ago than now, and situated close to a navigable river, and no explanation of greater mixing of population and cessation of intermarriage would apply here. The only alteration here has been industrial. Years ago this locality was so notorious for goitre as to give a name to the affection in that part of England. The women were also celebrated for their ability to steadily carry great weights on their heads, and at certain seasons of the year many of them were engaged to go to other localities and occupations where such an accomplishment was desirable. Following up this clue, I have found several instances of sporadic goitre where the only member of the family affected with goitre has been the only one who had carried weights on the head habitually; these have generally been people dwelling at a considerable altitude. In carrying weights on the head the return circulation of the neck is retarded and the arterial stimulated, conditions directly tending to congestion of the thyroid, and this I believe to be the most potent industrial influence, but any heavy exertion has a tendency to the same effect; and this would probably explain the not unfrequent cases in which domestic servants develop goitre in non-goitrous districts. In these cases there would, I think, generally be present hereditary tendency to goitre or a strumous and neurotic diathesis. I have ascertained that the traditional practice of one eminent medical man who practised in a goitrous district in the midlands before the introduction of iodine was to strictly enjoin upon his goitrous patients the necessity of not carrying weights on their heads and to boil the drinking water. This boiling of the water was probably intended to get rid of some of the lime salts, but it would also precipitate the iron where lime was present.

The Dietetic Influence.—If in my investigation into the origin of goitre I could have made my mind a complete *tabula rasa* as to all that I had previously heard or read on the subject, I do not think I should have found it necessary to consider the probable influence of the water at all in the matter. I am, however, disposed to think that in some of the localities water was certainly a contributing cause. In each of these cases a theory of excess of saline and earthy matters in solution, or of iron in solution in small quantities, would have been equally applicable. I have adopted the theory of iron, as it appears to me that it can be more readily and scientifically connected with hyperæmia of the thyroid body than excess of dissolved matter in the water consumed. In looking through the various text-books of medicine, nothing is more striking than the uniformity with which the quality of drinking water is assigned as the cause of goitre, though on the question of the element in water producing the evil the diversity of opinion is almost as remarkable. Personally I venture to express a belief that water is by no means essential to the production of the disease, and has frequently nothing to do with it. That every kind of water from snow-water downwards has been credited with producing the disease is presumptive evidence that water in some instances has had nothing to do with it, and I am satisfied that under favourable conditions of climate and industry goitre may occur altogether independently of the water, and, in the epidemic above alluded to, the water-supply of the majority of cases was derived from the hard Cambrian formation, and to quote the report of the well-known analyst, Mr. Sutton of Norwich, was "one of the purest natural waters which had ever come under his notice or of which he had seen any record." It did, however, contain slight traces of iron. Indeed, the very fact of the existence of an epidemic is, in the case of such a disease as goitre, strong evidence that water had nothing to do with the malady. Water has, however, been credited as the cause of goitre from the earliest records of medicine, and there is abundant testimony that it is often a potent contributing cause of the affection. To my mind no satisfactory explanation as to how it acts has yet been afforded, and on this point I speak with special diffidence. The theory I have to offer in the explanation of the goitriferous property of certain waters has however, I believe, sufficient basis of fact and probability to justify my bringing it before you. Of the numerous hypotheses which have been brought forward to explain the influence of water in the production of goitre, the two which have received most support from observers on the subject, and which appear to have the broadest basis of the fact are (1) the theory that goitre follows the use of water from magnesian and limestone rocks, and (2) the theory that the presence of iron pyrites in the strata from which the water is drawn is the cause. I believe that in the coincidence of these two may be found the true explanation, or, to speak more accurately, that the presence of iron in the strata in a form liable to pass into a soluble salt of iron on meeting with the ordinary spring water of the district may account for the above discrepancies, and afford a rational explanation. I am quite aware of the objection to the above theory, that iron is very universally diffused and constantly occurs in water where no goitre is found. This would, however, apply with equal force to any of the other properties of water which have been suggested as the cause. Iron pyrites is insoluble, but when brought in contact with spring water containing carbonate of lime and magnesia in carbonic solution it gradually passes by a process of oxidation into carbonate of iron. This salt of iron is, according to Professor Ringer, most readily and directly assimilated by the system. Now, the mode in which the water tends to aggravate or promote goitre may possibly be as follows: Iron is in a certain sense food, and is necessary and conducive to the formation of the red corpuscles of the blood. Administration of iron in anæmia increases the number of the red blood-corpuscles and the amount of iron contained in them, and although such result may not take place in health, it is not too much to assume that a readily assimilated form of iron dissolved in minute quantities in water would act as food for and stimulate the production of the red corpuscles, and so throw more work upon the glands which deal with these corpuscles in the system. Now, the most recent view as to the physiological function of the thyroid appears to be that it is an excretory organ for the effete blood-corpuscles, and may it not be that the observed effect is the result of undue ingestion of that form of food with the excretion of which the gland is concerned? I use the word food advisedly, because I believe (assuming the theory to be correct) the result to be due not to the ingestion of large quantities of iron, but to the habitual and constant consumption of minute traces of iron in a most readily assimilable form, and which would pass into the system as albuminate of iron. The carbonate of iron indeed under such conditions in natural water would be constantly in a state of change, and would only exist in the water in small amount in ordinary circumstances, and imperceptible to taste, and being a most unstable compound it is readily precipitated. This is a reason why iron in this form is not unfrequently overlooked, as after the lapse of some time and a little exposure the iron is precipitated, and no reaction follows the tests for iron applied to water in ordinary sanitary analysis. The therapeutic effects of iron may throw some light upon this point. When iron is administered therapeutically, a sensation of fulness and pain in the head sometimes supervenes, and is recognised as indicating the desirability of discontinuing the medicine. This would give support to the theory advanced. On the other hand, anæmia is frequently present with goitre. This may be due to the blood-elaborating function of the thyroid being out of order; but iron is said, in some cases of anæmia accompanied with goitre, to produce marked benefit. I believe these cases will be found where a strumous and neurotic diathesis is the preponderating cause. In connexion with this subject, I think it well to refer to the instance so frequently quoted of French peasants, who are alleged, in order to avoid the conscription, to artificially produce goitre by drinking goitriferous water. According to the best account I can obtain, the conscripts are said to "go up to Briançon." Briançon is, I believe, upwards of four thousand feet above the sea, and this fact, combined with the goitrous diathesis of many Frenchmen, would be powerful contributing influences.

Is Goitre diminishing in England?—Endemic goitre certainly is. In a disease where the influence of heredity is so marked, we may assume that the endemic prevalence may to some extent in isolated communities have been due to intermarriage, and that increased migration and facilities for travel would certainly tend to produce a decrease; but I am persuaded that the chief cause is due to the disuse of the practice of carrying weights on the head. This would chiefly apply to those hilly districts where a slight contributing influence, in addition to that of diminished atmospheric pressure, is all that is needed to induce the deformity. Throughout England generally there has been, during the last quarter of a century, a marked alteration in the custom of the rural population in the matter of carrying weights. To carry weights on the head safely, and with comfort, requires early training and practice. Before the introduction of tins with handles, the wooden milk pails with side handles were of such a shape and make that when full they could not well be carried by one person except on the head. Hence the early training and acquired facility in carrying weights on the head. The introduction of tin ware with handles has altered this, and led to the disuse of the practice, and, as I believe, may thus be said to have contributed to the diminution of goitre in some agricultural districts in England. With sporadic goitre in towns the case may be different. This affection is said by some to be on the increase. If this be so, and, considering the element of debility present in so many of these cases, the neurotic influence may be the preponderating one, and the theory advanced by Dr. Woakes is probably correct—viz., that this affection shares in a general increase of neurotic affections in the present age.

Epidemic Goitre.—Time will not allow me to do more than to refer to the epidemic of goitre mentioned in the commencement of this paper. It had been noticed for some months before I investigated it, and the cause I believe to have been purely climatic, probably aggravated by some meteorological condition peculiar to the year.

Connexion of Goitre with Cretinism.—On the theory of goitre being a circulatory disease and dependent to a large extent on atmospheric influences, the connexion of cretinism with goitre seems to admit of explanation. In some countries the goitriferous influences, including the strumous diathesis, may be sufficient to produce goitre and cretinism in the same individual. In this country cretins are rare, and in the majority of such cases in which a post-mortem examination has been obtainable, the thyroid has been found absent. Now, assume an infant of a strumous diathesis with deficient arterial tone under strong goitriferous influences. In the absence of the safety valve action of the thyroid, a cretinous condition would be expected to result. Indeed, the converse may be true, and I have recently met with a microcephalic idiot with a huge goitre.

NOTES ON TWO CASES OF REMOVAL OF THE JAW FOR TUMOURS.

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THE cases to which the notes below refer occurred during the present year and exhibit several points of interest.

CASE 1. *Large naso-pharyngeal polypus, removed by displacement of the superior maxilla.*—Badawah, Mahomedan, male, aged forty, was admitted into the Mayo Hospital, Lahore, on April 26th, 1884. His general health fairly good. Nothing noteworthy regarding his family, habits, &c. His present illness commenced three years ago, when he noticed some obstruction in his right nostril. Since then the obstruction has progressed gradually with swelling of the right cheek, difficulty in breathing and swallowing, and a moderate amount of pain. Urgent symptoms, connected with dyspnœa, dysphagia, and want of rest, have been present during the past three or four months, and lately he has lost much flesh.

Present state.—A thin and weakly-looking man, evidently considerably emaciated and with a marked look of distress; breathes with mouth wide open, and voice has a marked nasal twang. The right cheek is seen to be bulged outwards *en masse*, the outline of the bone not being interfered with. At the inner angle of the right eye is a soft swelling, the shape and size of an almond, which can be emptied of thick mucoid material into the nose by applying pressure over it. Both nostrils are completely blocked, the right by a soft reddish growth which extends to within a quarter of an inch of the orum nasi, and the left by the septum, which is pushed over in a very marked degree. On looking into the mouth the hard palate is seen to be natural, but the whole of the upper two-thirds of the pharynx is occupied by a rounded mass which pushes the soft palate down in front of it, so as to interfere considerably with respiration. Marked dysphagia is also present, and liquid food only can be taken. The diagnosis of naso-pharyngeal polypus of large size and probably high attachment was made. The patient's general condition was good, and he was very anxious for something to be done.

On April 28th chloroform gas was given by the mouth, but produced troublesome symptoms owing to pharyngeal obstruction. Tracheotomy was performed and the inhalation of chloroform carried on without further hitch through the tube. The right superior maxilla was then displaced in the ordinary way, the superficial incision being carried through the centre of the upper lip, along the side of the nose and lower margin of the orbit, and the flap turned downwards. The bone was then divided by saw and bone forceps and displaced outwards, the soft palate being separated transversely from the hard on the right side. An enormous soft reddish growth was found occupying the naso-pharyngeal and right nasal cavities, having three or four points of attachment to the under surface of the skull. The largest portion (about the size of a medium orange) was detached and removed with difficulty through the mouth. Various smaller pieces were torn off and withdrawn from in front and the stump freely cauterised with the hot iron. Throughout the operation there was remarkable freedom from hæmorrhage. The bone was then replaced and kept *in situ* by drilling the malar process and wiring it together with silver wire and connecting the incisor teeth in the same manner. The flap was sutured with alternating wire and catgut sutures, the soft palate being left untouched.

The man was placed in a separate ward, which was kept at a uniform temperature and carefully steamed at night. The tube was left in the trachea for the first twelve hours, and covered with a light bag of pine sawdust, purified with eucalyptol. At the end of this time it was removed, and a light bandage applied. Recovery was uninterrupted, and very rapid. The patient slept well and could take large quantities of liquid nourishment. Pulse of good quality, and the temperature never exceeded 100·5°. On the third day his condition was as follows:—Temperature 100°; pulse 90; wound entirely and soundly healed by first intention, with the exception of a small opening through the soft palate, and another at the point of exit of the wire through the malar bone; tracheal opening contracted to the size of a crowquill; moderate amount of inflammatory swelling about the right side of the face, but this rapidly disappeared. All the sutures were removed, and on the seventh day the man sat up in bed and ate soft solid food, being quite free from all symptoms of dyspnœa and dysphagia. The wire suture was removed on the tenth day, and in the following night he considered himself well enough to run away, a common practice with patients in this country. He was seen at work accidentally about a week afterwards.

Remarks.—The points of interest in connexion with this case are: 1. The large size of polypus. 2. The great help obtained during the operation by first performing tracheotomy. 3. The rapid recovery of the patient.

CASE 2. *Entire excision of the lower jaw for myeloid sarcoma.*—Mussamat Jhandi, a female Hindoo aged thirty-two, was admitted into Jullunder Dispensary on September 26th, 1884.

Her general health had been good; mother of several children, and is at present nursing one. Has had occasional attacks of intermittent fever, but not seriously. No history of syphilis. Her present illness commenced two years ago with a swelling about the central incisors of the lower jaw; very gradual at first, but much more rapid during the last three months. Has emaciated considerably of late, and especially since the protrusion of the growth between the lips (about two months). Can assign no cause, and has not had much pain, but suffers principally from the inconvenience arising from the position of the growth and the difficulty in masticating and speaking.

Present state.—A slightly made and much emaciated woman about thirty years of age. Temperature normal; pulse weak and small; respiration healthy. No disease present, with the exception of that in the lower jaw, which is the seat of a growth of a reddish colour, part of which protrudes between the lips. The protruded portion is the size of a large walnut, irregularly lobulated and ulcerated on the surface from constant exposure to air and dirt. The lips cannot be made to close over it. Internally the growth is found to involve the lower jaw, principally at its upper or dental margin, and to be of a soft, almost fungating nature, with the teeth embedded and lying quite loosely in it. The bone itself is felt to be considerably expanded in its upper half, the limits being on the right side beyond the last molar tooth, and on, up to, and including the first molar. The lower border of the bone is free, but behind the symphysis there is a nodule, about the shape and size of half a walnut, which appears to be springing from the bone. The whole growth is about the size of a small orange, and gives the jaw a peculiar pointed appearance. No enlargement of glands can be detected, nor are the superficial structures in any way involved. There is the greatest difficulty in eating anything, even liquids being taken with considerable effort, so that really the woman is being slowly starved. Speech is so much interfered with that her statement is made out with difficulty. She is extremely anxious for an operation to be performed.

She was kept quiet in hospital, and fed up as far as possible for twelve days, taking also small doses of quinine. During this time it was noticed that there was a decided increase in the size of the growth and its protrusion from the mouth.

Operation.—On Oct. 9th, under chloroform, laryngotomy was performed as a preliminary step in order to facilitate the main operation by obviating the risk of the respiration being impeded by the falling back of the tongue over the glottis, and also to facilitate the administration of chloroform. A ligature was then passed through the tip of the tongue, to retain command over it in case of any accident to the tube in the larynx. At this stage, owing to the failure of the heart's action, the pulse, which had been very bad throughout, ceased altogether, and artificial respiration had to be performed for about ten minutes and a brandy enema given. On the restoration of animation, the administration of chloroform was continued through the tube. No further trouble was experienced on this score, the breathing and pulse continuing good throughout the remaining steps of the operation. An incision was made on the right side from a point three-quarters of an inch below and half an inch in front of the external auditory meatus along the lower border of the jaw to the median line. The facial artery was controlled and ligatured before any hæmorrhage took place. The bone was then cleared by means of a blunt periosteal scraper, the knife being entirely laid aside, except to divide the mucous membrane and, carefully guarded, to touch the capsule of the joint from in front. One small muscular branch in the substance of the masseter had to be ligatured, but no large vessel was injured, and the bone was entirely and cleanly cleared. Detaching the temporal muscle from the coronoid process was found to be the most troublesome part of the operation. The same process was gone through on the left side, the facial line being twisted, and no ligature was necessary. The bone was removed in its entirety, and was quite free from soft parts, with the exception of a small portion of the insertion of the internal pterygoid on the left side. Not more than an ounce and a half of blood was lost during the whole operation, which occupied an hour and a half. An enormous wound, seven inches in length, resulted, which was carefully closed by ten metallic and sixteen catgut sutures, the edges being painted over with compound tincture of benzoin. The tube was left in the larynx and covered with a light pad of carbolised sawdust. The following arrangements were made:—1. A separate ward and special service of attendants. 2. The nights being unusually cold for the season of the year, and the difference between the day and night temperature being marked, care was taken to maintain an equable temperature by means of fires and steaming the room between the hours of 5 P.M. and 9 A.M. 3. The tube was constantly protected with a light pad of sawdust and muslin bandage, and cleaned out with a feather occasionally. At the end of twenty-four hours it was changed, and on the fourth day removed altogether, the patient continuing to breathe through the opening. 4. A pint of milk and half an ounce of brandy were given every eight hours, and an enema of soup (four ounces) with brandy (half an ounce) each afternoon. 5. A solution of morphia (one drachm) was given night and morning.

The woman did remarkably well from the first. There was no shock, and with the exception of a moderate amount of pain, principally in the head, she was fairly comfortable. She slept a good deal day and night and took all the nourishment ordered by her own efforts for the first thirty-six hours; but after that, owing to the presence of inflammatory swelling and the fixing of the tongue to the floor of the mouth, she was fed through a tube passed to the back of the pharynx. The wound united firmly throughout by first intention and half the sutures were removed on the third day and the remainder on the fourth, when her condition was as follows:—Temperature 100·5°; pulse 110; respiration 28. Breathing quietly, and can lie in any position with comfort, and sit up. Is suckling her baby, and has insisted in doing so since twenty-four hours after the operation. Asked for semi-solid food and is picking up strength and flesh very rapidly. Can articulate when the laryngeal opening is closed with the finger. Tongue clean and bowels regular. There is only moderate discharge from the interior of the mouth and no facial paralysis. On Oct. 14th, or six days after the operation, the temperature rose to 102·5° and the respiration to 35. Patient complained of pain in the right axilla, but nothing could be detected on examination. A mustard plaster was ordered and greater precautions were taken to avoid chill. However, symptoms of acute pleuro-pneumonia of right side developed themselves, and the patient died on the eighth day of exhaustion. No doubt the woman, considering herself out of danger, had thrown off her clothing during the early part of the night and had caught a chill in the early morning, when the difference in temperature was most marked. Post-mortem examination was not allowed.

Remarks.—As in the previous case, the opening of the larynx as a preliminary measure was of the utmost service during the performance of the operation itself, and almost a necessity afterwards owing to the tendency of the tongue to fall back on the glottis. The remarkable freedom from hæmorrhage, and the fact that the facial nerve on both sides was uninjured, I attribute entirely to the use of a blunt scraper instead of a knife. It is evident from the rapid progress of the patient towards recovery that the cause of death was accidental, and I think it may be claimed that the operation itself was successful. I made no objection to the mother suckling her child, so long as she took and assimilated such large quantities of nourishment, for it is a common occurrence in this country to continue suckling after the most severe operations and injuries. Examination of the tumour showed it to be a myeloid sarcoma springing from the central portion of the maxilla, and involving the dental margin. I am indebted to Surgeon-Major P. Ramsay for his able assistance during the operation.

CLINICAL STUDY OF THE LIVER VIEWED THROUGH THE URINE.

BY GEORGE OLIVER, M.D. LOND.

(Concluded from p. 884.)

The systemic diffusion of bile salts from the portal organs is apparently not excessive, but the kidneys fail to keep pace with it.—Hitherto I have dealt only with the reaction of the peptone test suggesting the presence of an increased quantity of the biliary salts in the urine; as in jaundice, diseases of the liver and spleen, fever, and in diseases in which the cellular elements of the blood undergo dissolution—such as some varieties of anæmia, scurvy, and hæmoglobinuria; the increase being absolute, even though the discharge of the biliary elements is at times lessened. Should any clinical value be attached to the renal elimination of bile salts when subnormal, or reduced to the verge of extinction? I am under the impression that a surcharge of these excreta in the blood may now and then take place from an imperfect removal of them by the kidneys, though there are no apparent indications of derangement or embarrassment of the portal organs to favour the accumulation. This is as yet, however, but little more than a surmise; and it may turn out that the detection of an excess of these biliary derivatives in the urine is the only important clinical aspect of the subject. A subnormal reaction is met with in many apparently healthy individuals, in whom perhaps the other emunctories, the skin and the bowels, are in this respect more active than usual, or in whom there is less biliary matter to be disposed of; also in a large proportion of those said to suffer from chronic biliousness, but who for their years probably make less bile than normal (subcholia), and in various forms of deficient constructive activity, as in ordinary anæmia and the like.

Chronic renal disease.—I have been rather struck with the fact that in all the cases of cirrhotic kidney I have examined the reaction was either decidedly subnormal or *nil*. But in a case of waxy kidney, which I observed from its origin to its close, the reaction was always above normal —often considerably so—and the post-mortem examination afforded no indications of uræmic poisoning, nor were any observed during life.[1] If this observation be confirmed by further inquiry, perhaps the question will arise how far should the symptoms of uræmia be referable to the grave form of cholæmia that culminates in convulsions and coma?

Skin disease.—So far I have always found the reaction subnormal in eczema. This is the urine of a patient now under observation, and the reduction amounts to at least one-half.

Conditions that influence the renal elimination of the biliary salts.—I think it is highly probable that neurotic influences frequently play a leading part in checking the discharge of these excreta by the kidneys; they are, however, often obscure and difficult to track. Hence the teaching value of experimental evidence, such as that lately brought forward by M. Vulpian, who applied electric stimulation to the white matter in the neighbourhood of the sigmoid gyrus, and on inserting cannulæ into the bile-duct and urethra found the flow of bile increased and that of the urine arrested, and the animal was seized with epileptic convulsions. This observation is probably of clinical interest in suggesting how a source of eccentric irritation—such as an undigested mass lodging in the stomach—may take the part of the electric current of the experiment and induce like effects. Then, again, some medicines increase the renal elimination of bile salts, while others appear to check it. The experiments of Feltz and Ritter showed that the preparations of antimony and arsenic augment the bile salts of the blood and the urine; and the mode of death in chronic poisoning by these metals is similar to that induced by the biliary salts—namely, cardiac asthenia and fatty degeneration. On the other hand, opium is probably a checking agent; and this remedy *administered alone* is, as a rule, a sort of touchstone with the cholæmic. If this be so, the clinical acumen of Graves, who *prescribed antimony* along with opium in the cerebral excitement of fever, shot ahead of experimental inquiry; and perhaps other corrective combinations, such as Dover's powder, which have received the sanction of experience, may be shown to rest on a basis of fact which accounts for their *raison d'être*.

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[1] Just at this time I have under observation a young lady, aged twenty-one, suffering from intermittent albuminuria of hepatic origin, in whom I have noted the interesting fact that when there *is not a trace* of albumen (as is always the case in the urine discharged before breakfast) the amount of the bile salts as indicated by the peptone test merely reaches the normal standard; but when albumen appears (as it is apt to do in considerable quantity three or four hours after a meal) the proportion of the biliary elements rises considerably, becoming doubled or even trebled, and this at a time when they should appear in smaller quantity than in the morning. When after a meal there is no albumen, the bile salts are found in subnormal amount.

The degenerations of the cholæmic.—I am disposed to conclude that fatty degeneration is a prominent pathological feature of cholæmia. This position was well illustrated by the post-mortem examination of a patient whom I recently saw in consultation with Dr. Johnson of Kirkby Overblow. Within a period of four months a woman, aged fifty, became extremely anæmic without obvious cause, and without presenting any distinctive indications of organic disease; a positive sign of mischief was, however, afforded by the urine, which, though generally rather high coloured, gave no reactions of bile pigment, but, according to the peptone test, always contained a large quantity of bile salts—never less than 300 per cent. increase. The post-mortem examination, however, did not reveal the cause of the anæmia; it merely indicated the existence of widespread and advanced fatty degeneration—e.g., of heart, liver, &c. The amount of blood was remarkably small, and no clots were observable. I obtained about half a teaspoonful from the chambers of the heart, and on submitting it to microscopic examination I readily detected numerous molecules of fat, varying in size from that of mere granules to the dimensions of the largest oil globules found in milk. This observation of the fattiness of the blood was corroborated by several medical friends. The corpuscles were mostly leucocytes.[2] In four days the cellular elements had almost entirely disappeared, and the oil globules were much more numerous.

May not the continued discharge of an excess of bile salts by the kidneys favour or lead to the development of chronic renal disease?—I have no facts to adduce in favour of this suspicion, and I can merely point to the parenchymatous degeneration of the kidneys induced in animals by the intravenous and subcutaneous injection of bile salts, as recorded by Leyden, Feltz, Ritter, and Brown; and to the interstitial renal changes observed in leucocythæmia and in chronic jaundice. In this connexion, perhaps, I should note that Nothnagel believes that renal tube casts are always to be found in the urine of jaundice when bile acids are eliminated by the kidneys, and that Dr. George Harley has observed both hyaline and granular casts in the form of albuminuria which he denominates "hepatic."

When this paper was sent to press I proposed to append to it an addendum, consisting of notes of some recent observations on decoctions of liver, spleen, mesenteric glands, &c.; but other work just now compels me to defer the publication of these data, which, however, merely form the basis of further inquiry to be resumed next winter.

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[2] The small number of red discs, and these considerably deformed, was remarkable. Were they in great part dissolved during the thirty hours that intervened between death and the post-mortem inspection? I think it is quite possible, if not probable, that such an event may happen after death in the cholæmic, just as it has been observed to occur [illegible] in hæmoglobinuric urine after emission.

THE statue of Pinel, given to the municipality of Paris by the Société Médico-Psychologique, and which has been placed in the Place de la Salpêtrière, will, it is stated, be formally unveiled on the 13th prox.

A CASE OF CONVULSIONS DURING PREGNANCY TREATED BY INJECTIONS OF PILOCARPINE; RECOVERY.

BY P. HORROCKS, M.D. LOND., B.Sc., M.R.C.P.

E. N——, aged twenty-four, was admitted into Guy's Hospital on March 7th of this year under my care. She had been married fifteen months, and had had one miscarriage before the third month, in June, 1884. Before marriage she was a servant, but since she has done only her own housework. She had never previously had any fit nor was there any tendency to fits in her relatives. Her father died of phthisis. Her own health has always been good. Her menstrual periods have been irregular, occurring at intervals varying from three weeks to two months. She is not quite sure when her last period occurred, but thinks it was in August, 1884, and believes herself to be seven months' pregnant. A week ago she began to have headache, which grew worse and occasionally she vomited. At 1 A.M. to-day (March 7th) she had a fit which lasted a few minutes, and after this at intervals of less than a quarter of an hour she continued to have fits throughout the day, each lasting from three to ten minutes. Ice-bags were applied to the head, and a purgative given which acted. No urine passed during the day. Dr. Faraker, who was attending the case, sent her up to Guy's, where she was admitted at 9.20 P.M. The face was much swollen, and the body and lower extremities œdematous, and some blood was issuing from the mouth, the tongue being severely bitten on the left side. A catheter was passed, but only a drop of urine came away in it. Vaginal examination appeared to bring on the fits. A gag was placed in the mouth to protect the tongue. There was much lividity. Two fits took place in the first half hour, the first being very severe, convulsing the whole body. Chloroform was administered, and it relieved the severity of the convulsions. A catheter was again passed, but no urine came away. At 10.5 P.M. a fourth fit came on during a vaginal examination. The fœtal heart was heard beating at the rate of 140 per minute. The patient has been quite unconscious since morning. At 11.30 P.M. a third of a grain of hydrochlorate of pilocarpine was injected subcutaneously, the patient being well wrapped up in hot blankets. In five minutes profuse sweating took place. At 12.10 A.M. (March 8th) another but much slighter fit came on. 2.15 A.M.: The sweating is nearly finished. She can be roused to some extent, but does not answer questions. A fourth of a grain of pilocarpine was injected, the patient resisting the puncture. Sweating began again in less than five minutes. Much of the lividity has disappeared. Temperature 101°; pulse 120, and less tense than it was. During the night the patient took some milk and brandy. She remained somewhat lethargic and did not speak in answer to questions, but put her tongue out when requested to do so. The left side of the tongue was bitten right through. At noon, and again at 5 P.M., a fourth of a grain of hydrochlorate of pilocarpine was injected hypodermically. Temperature normal; pulse 82. Five ounces of urine were drawn off; specific gravity 1020, acid, highly albuminous (nearly solid on boiling).—9th: No fits; temperature subnormal; took 23 oz. of milk; the tongue is in a very painful and swollen condition, the patient can scarcely speak for it; she is quite conscious. The mouth was washed out with a lotion of chlorinated soda.—10th: Bowels opened; urine passed normally; still albuminous.—11th: Urine acid; specific gravity 1015; albuminous.—12th: Passed 45 oz. of urine during the last twenty-four hours; less albumen.—13th: Colostrum in breasts. Fœtal heart sounds cannot be heard. Uterus seen to contract firmly at times; os patulous.—14th: Pain in abdomen; uterine contractions (?). Has complained of headache ever since she could speak.—15th: Albumen in urine is steadily diminishing in quantity. Still taking milk only.—16th: Labour pains set in, and a partly macerated dead fœtus was born at 4 P.M. The placenta was expressed after giving the patient chloroform, as she was too tender in the abdomen to allow it to be done without. Examination of the fœtus showed it to be between the sixth and seventh month. There was no ossific centre in the astragalus. An interesting point about the fœtus was that the testes were completely descended into the scrotum.

It is not necessary to detail the further progress of the case. The patient made a rapid recovery, and left the hospital on March 28th with only a trace of albumen in the urine, a slight headache, and no œdema. She has been attending as an out-patient under my care since, and the last time she came up there was no albumen at all, and the headache had entirely disappeared. This is the only case that I have treated with pilocarpine, but the result was so immediate and so satisfactory that I thought it worth publishing. The patient had only one slight fit after the pilocarpine was commenced, and she seemed to improve rapidly. How it acted is less clear, but it seemed to me to relieve the system by causing the skin to take on the function of the kidneys vicariously.

Many believe that when convulsions come on during pregnancy the uterus should be emptied as speedily as possible. Others believe in venesection or anæsthetics, especially ether and chloroform. An interesting point in the present case is that the patient was relieved, and practically cured, of the convulsions without emptying the uterus. Labour did set in, however, a week later, apparently spontaneously. It may be that the fœtus died in utero during the convulsions, and that labour set in consequently; but pilocarpine has been used for the induction of labour by Marsman of St. Petersburg and Clay of Birmingham.[1] Hence it may be that the injection of this drug set up the uterine contractions, which resulted in premature birth. Dr. Fordyce Barker in 1879 condemned the use of pilocarpine in puerperal convulsions,[2] asserting that it produced continuous and exhausting depression. In Clay's case there was very alarming depression; but this was a case not of convulsions, but contraction of the pelvis, in which the drug was given to induce labour. In my own case there was no depression to cause any anxiety. Hence I think the drug deserves further trial in these very distressing and often fatal cases.

St. Thomas's-street, S.E.

A COCAINE SPRAY PRODUCER.

By H. PERCY DUNN, F.R.C.S.,

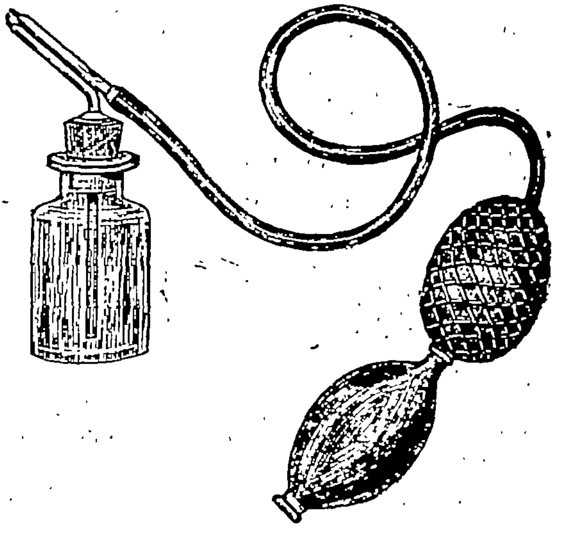
ASSISTANT OPHTHALMIC SURGEON AND PATHOLOGIST TO THE WEST LONDON HOSPITAL, AND LECTURER ON ELEMENTARY PHYSIOLOGY AT THE WEST LONDON HOSPITAL PREPARATORY SCHOOL OF MEDICINE.

As the use of a spray producer undoubtedly commends itself in regard to the employment of cocaine in surgery, I have just devised an apparatus which, by the introduction of certain modifications upon the usual type, will be found to meet the requirements of the case in question.

In the first place, cocaine is a drug the universal use of which is somewhat curtailed by its expensive nature, consequently every drop of a cocaine solution has some significant value; further, the mission, so to speak, of cocaine when applied to a part is eminently a pacific one, and is in all respects different from the germ devastating, germ murdering objects of the gross carbolic spray, which with this purpose in view can be discharged over a wound with no inconsiderable velocity. Having therefore prefaced the description of the new spray producer by these remarks, the significance of the points to which I will now draw attention will be the more readily understood. From the accompanying illustration will be gathered the general appearance of the apparatus, and it is therefore only necessary to refer to its special features.

The spray producer is made of silver, and the jet is as fine as it has been possible to produce; it plays softly over a part without spluttering, and is so constructed as to act upon the eyeball without inconvenience to the patient; in the ordinary sprays the air contained in the reservoirs has only one means of exit—namely, through the jet. One of the results of this is the waste of some of the solution, inasmuch as the spray continues to act until the air is exhausted in the reservoir. In order to counteract the waste, which in the case of cocaine would represent something in the end worth saving, a small aperture has been made in the air-tube which while the spray is in use can be kept covered by the thumb. As soon, however, as the spray is no longer required the thumb is removed, the air at once escapes through the opening, and simultaneously the action of the jet is arrested. This contrivance obviates all dropping of the solution, and at the same time renders the spray exceedingly handy in the matter of regulating its action.

The cocaine spray has proved useful in all ophthalmic operations, and for all operations upon mucous membranes. In the removal of hæmorrhoids, for instance, the assistant could keep the part in an anæsthetic condition by an occasional spray while the surgeon without interruption carried out the various details of the operation. Again, in general surgery it might be equally useful; for instance, in herniotomy, ligature of arteries, and other operations of this nature. The difficulty, however, is to obviate the pain of the first incision through the skin; but this having been overcome or ignored, a sufficiently strong solution of cocaine sprayed over the exposed surface of the subcutaneous tissue would render the operation painless throughout the rest of its course, and for this reason practicable without the employment of a general anæsthetic.



The spray producer can be procured of Messrs. C. Wright and Co., 108, New Bond-street, who have made it at my suggestion, and I am glad to be able to take this opportunity of thanking them for their assistance and for the trouble they have taken in the matter.

St. Stephen's-road, W.

ON A CASE OF IDIOPATHIC TETANUS.

By OCTAVIAN N. ROYLE, M.D., F.R.C.S. Eng.

I was sent for at two o'clock on the morning of March 11th last to see the wife of the gravedigger of the parish of Grouville. The messenger upon inquiry informed me that she had been feeling ill for the last ten days with spasms and slight pains in the stomach, and that her bowels had been unrelieved for more than a week. Looking at the constipation as cause and effect—the night, moreover, a stormy one, and the house some distance from my residence,—I did not consider the nature of the attack one of sufficient urgency to pay a visit at that early hour, so sent her by the bearer a brisk purge of croton oil, with directions to foment the body well until I saw her. Calling at eight o'clock the same morning, the bowels, I found, had freely acted, but the pain and spasm associated therewith had much increased. I then for the first time recognised the nature of her case. The last day in February, it seems, this poor woman had become greatly alarmed at seeing the hand of a child placed on a machine for cutting turnips in motion, although with no injury to the child further than a slight graze of one finger. It was a clear case of idiopathic tetanus from nervous shock. The poor husband was in great grief and distress about his wife, whom I succeeded in calming by my assurance that she would soon be better; nevertheless, every day for more than a week after first seeing her the symptoms increased in severity. Trismus and opisthotonos at one time were well marked, the latter coming on after an interval of some hours, and lasting from five to ten minutes, resisting apparently all treatment employed, first with opium, in two-grain doses every three hours for three consecutive days, then with chloral, in half-drachm doses every four hours for a like period, with very little improvement, and subsequently with one grain of morphia injected hypodermically every night with two of Indian hemp, repeated at short intervals during the day, the symptoms after this treatment gradually disappearing on the second day until her recovery, just three weeks after receiving the shock. The case, I think, of some interest and worthy of record; first, from the great impression made on the nervous system from so slight a cause; again, no marked symptom of the disease showing itself until the eleventh day after the fright, resisting at first all treatment; and lastly, succumbing to Indian hemp and morphia injections, a line of treament I should commence with most certainly if ever called upon to treat a similar case.

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[1] The Lancet, 1879, vol. i.

[2] The New York Medical Record.

Grouville, Jersey.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia *pro certo noscendi* via, nisi *quamplurimas* et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

RENAL CALCULUS; NEPHRO-LITHOTOMY; CURE; REMARKS.

(Under the care of Mr. BERKELEY HILL.)

THE treatment of calculus of the kidney is well illustrated by the two cases which we publish this week. In the first case, where the symptoms had been noticed about seven months before operation, the renal structure had been so little altered by inflammatory changes that the organ was left after removal of the calculus. In the second, symptoms referred to the kidney had been present on and off for sixteen years, and extensive pyonephrosis induced by the presence of the calculus; for this the kidney was also removed. In each the result was satisfactory, and the cases form interesting contributions towards the surgery of the kidney, which has made such rapid advances during the last few years.

For the report of this case we are indebted to Mr. Bilton Pollard, B.S., surgical registrar.

E. R——, a woman aged forty, was admitted to the hospital on Oct. 23th, 1884. She stated that about three months previously she began to suffer from a gnawing pain in her right loin, which shot down to her right groin and knee; the pain came on suddenly, and was attended by vomiting. About a week later her urine was thick and red, but not, *she* thinks, due to blood. She passed urine frequently during both day and night; she never noticed any blood in it.

On admission the patient had occasional attacks of pain in her right groin and thigh; she had some tenderness in the right loin, but it was doubtful if any fulness was present there. Her urine was acid, had a specific gravity of 1020, and contained an abundant deposit of pus. She remained only three days at the hospital at that time, but she was readmitted four months later, and then stated that during the interval the attacks of pain had been more severe. Her urine was acid; it had a specific gravity of 1010, and contained a large quantity of pus, and on one occasion was dark-brown from mixture with blood. There was a slight fulness in the right loin, and during deep inspiration the kidney could be felt, and it was rather tender. From the persistence of the symptoms and absence of others connected with the bladder, Mr. Hill concluded that there was a calculus in the right kidney; and on March 11th, 1885, he exposed the kidney in the loin and punctured it in several places with a needle, but he did not strike a calculus. He next explored the surface of the kidney thoroughly with his finger and detected a hard substance at the lower part of the organ near the hilus; towards this point, guided by the position of the tip of his finger, he passed a knife through the kidney and struck the calculus. Finding it closely embedded in thick layers of fibrous tissue, he then enlarged the incision in the hilus of the kidney, and after freeing the calculus with a scoop, he extracted it with his finger. The wound was closed, except at the posterior part, where the drainage-tube was placed; carbolic gauze dressings were applied. During the first forty-eight hours after the operation the watery fluid, probably serous, not urinous, which drained from the wound was too great for the antiseptic dressings to retain. Notwithstanding this, the wound remained aseptic all through. About eight hours after the operation the patient passed three ounces and a half of urine per urethram; it contained pus. Nine hours later she passed an ounce and three-quarters of urine, which contained much less pus. During the first twenty-four hours after the operation the total amount of urine passed was only twelve ounces, which contained thirty-nine grains of urea; during the next twenty-four hours twenty-seven ounces of urine, containing 106 grains of urea, were passed. The quantity of urine excreted increased day by day until it reached forty-nine ounces, containing 364 grains of urea, during the sixth period of twenty-four hours. On the fourth day after the operation the pus entirely disappeared from the urine and remained absent for about six weeks, and then returned in slight amount. The patient had no return of the lumbar pain. She was discharged seven weeks after the operation; there was then a little pus in the urine, and the wound in the loin was almost healed. The calculus weighed 142 grains; it had an irregularly conical shape, and measured an inch across its base and along the two longest sides; the apex of the cone was smoothed off, and was represented by a flat facet, which seemed to indicate that it lay in the kidney against another calculus, but although this was carefully searched for at the time of the operation, it could not be detected. The patient was seen again on May 15th, when she was in generally good health. She said that she had felt pain in her right loin during that day for the first time; the wound had healed, and there was no fulness or tenderness there; her urine was turbid with flocculent pus.

Remarks by Mr. BERKELEY HILL.—The above case of nephro-lithotomy was very successful, though disappointing. It was successful in that a correct diagnosis of a renal calculus could be made on the presence of three symptoms—persistent pain in the loin, shooting thence towards the groin, the presence of pus in acid urine, and occasional slight hæmaturia at the onset of the case; successful also in that the calculus was found and removed without difficulty through an incision into a healthy kidney from the loin, with the effect of removing the symptoms from which the patient suffered. But the case is also disappointing in that after the urine had been free from pus for six weeks, and the pain in the loin relieved, there should be a return of the purulent discharge. It is difficult to explain this relapse, unless we conclude that there is still another calculus in the kidney, and this view is somewhat supported by the existence of a flattened surface on the irregularly shaped calculus which was removed. This flattened surface was observed at the time of the operation, and I searched very carefully for another calculus, but failed to detect one, and attributed the surface to the stone having been moulded in a calyx which fitted it closely. It is possible that so long as the wound in the loin remained open the pus discharged itself through that channel, and that when the wound closed the pus was obliged to find a vent along the ureter. Meanwhile the patient is enjoying a state of health and complete freedom from pain which she has not had for some years past.

DUNEDIN HOSPITAL, NEW ZEALAND.

A CASE OF NEPHRECTOMY FOR CALCULOUS PYELITIS AND PYONEPHROSIS; CURE; REMARKS.

(Under the care of Dr. COLQUHOUN.)

THE notes of the following case are furnished by Mr. Christie, clinical clerk.

John C——, aged forty-four years, a shepherd, single, was admitted on Dec. 26th, 1884. He is a native of Inverness, Scotland, but had been in Otago for the last twenty years He came of a healthy family, and, excepting his urinary troubles, had always been a healthy man. About sixteen years ago he first felt pain in the left side, just below the ribs behind, and shooting towards the front. His urine was dark in colour and contained blood. These symptoms continued for about a year. He was then bled and took some medicine, and was free from pain afterwards for about two years. The pain again becoming severe, he came to Dunedin, where a doctor told him that a calculus was passing down from his kidney to his bladder, and after some treatment the pain again ceased. Two years later he began to feel something turning in his bladder, and the urine was frequently suddenly stopped in micturition. Blood was passed occasionally, and he had several attacks of shivering. The urine then began to dribble away in small quantities when he tried to pass it. He came into Dunedin Hospital, and while there Dr. Hulme made an incision into the urethra in front of the membranous portion, and removed a small calculus. He left the hospital well, and was free from any severe pains for four years. He then again had pain in the left side and was "fevered," for which symptoms he was admitted into the Queenstown Hospital, where he stayed for about a week. Since then he has frequently had pain in the left side, worse on riding or after any exertion. His urine has contained a thick sediment for a good many months, he cannot tell exactly how long, and lately he has lost flesh and strength to a considerable extent. In November, 1884, the pain in the left side became severe and continuous, but he does not recollect having any sweating or shivering attacks.

Present condition (Jan. 13th).—The patient is a man of exceptionally good physique, but somewhat emaciated. He says he has lost at least two stone in weight within the last few months, and that he is much weaker than he has ever been. The lungs and heart are healthy. No abdominal tumour can be felt, but on deep pressure in the left hypochondriac region he complains of pain. There is no fulnesss in that region nor any notable increase of dulness. The pulse is quick and somewhat weak. The temperature is normal. He complains of constant dull aching pain in the region of the left kidney. The urine is faintly alkaline, contains phosphates, and there is a deposit of pus on standing to the extent of about a tenth of the total amount of urine. On the 15th there was little or no deposit in the urine examined. On the 18th, at noon, he had a severe and prolonged rigor, the temperature rising to 105°; the urine afterwards passed contained an abundance of pus, and was acid in reaction. For the next few days the temperature kept about 100° to 101°; on the 21st the urine contained no trace of pus, and was free from albumen. The bladder was examined with a sound, but was found to be normal. A consultation was held with the members of the hospital staff, and an exploratory incision in the left lumbar region was recommended, with the view of performing nephrectomy or nephro-lithotomy, according to circumstances. The condition of affairs was explained to the patient, who agreed to the operation. The amount of urine passed daily for five days before the operation was noted, and was as follows: Jan. 25th, 42 oz.; 26th, 35 oz.; 27th, 37 oz.; 28th, 35 oz.; 29th, 33 oz.

On the 24th the temperature was 101·4°, and it kept fluctuating daily, but there were no severe rigors.

Operation (29th).—The patient, being anæsthetised with ether, was placed on his right side with a pillow under his flank. An incision was made on the left side, parallel with the last rib and about an inch below it, extending from its anterior extremity to the outer border of the erector spinæ. The distance between the lower border of the centre of the rib and the crest of the ilium was two inches and a quarter. On cutting through the skin, muscles, and fascia, the lower end of the kidney was laid bare without difficulty. It was elastic and fluctuating, and an aspirating needle was inserted. About six ounces of thick pus were drawn off. The needle was then pushed in various directions, but no calculus could be felt. An incision was made into the kidney, and about eight or ten ounces of pus subsequently escaped. On passing the finger into the opening, the kidney could be felt to be sacculated and much enlarged; externally it was strongly adherent to surrounding parts in every direction. The kidney was with considerable difficulty separated from its attachments, and was pushed from the abdomen towards the wound. The external incision was increased anteriorly, the amount of space to be gained by a downward incision being so small that no attempt was made to increase the aperture in that direction. As it was not possible to withdraw the kidney whole, a stout hempen ligature was passed round the pedicle, and the lower half of the kidney was cut through and taken away. Considerable bleeding followed this, which was controlled by pressure with sponges and forceps. A large calculus could now be felt in the pelvis of the kidney, and two or three small pieces extending into the calyces were removed. The other part of the kidney was then removed, another ligature having been placed on the pedicle, which was drawn towards the edge of the wound. No attempt was made to ligature the ureter and vessels separately. Bleeding ceased after the second ligature. The wound was washed out with chloride of zinc solution, a large drainage-tube was put in, and the skin incision was closed with silver sutures. The operation was done under the spray. The kidney weighed twenty ounces and a quarter, and the calculus half an ounce.

30th.—The patient has passed a good night. To-day he says that the pain in his side is less than it was before the operation. In the twenty-four hours following the operation he passed thirty-five ounces of urine; that first passed contained a great deal of blood and some pus, the last being quite clear. Temperature (10.30 A.M.), 100°; pulse, 112.

31st.—10.30 A.M.: Temperature 103·2°; pulse 120. There is a good deal of oozing of sanious pus from the wound. In twenty-four hours he passed thirty-four ounces of urine, containing a copious deposit of phosphates, but free from pus or albumen. Henceforth no pus or albumen was present in the urine. During the first week the wound became very foul and septic symptoms set in. The tongue became brown and hard, the temperature reached 104·8°, and the pulse was as high as 150. Charcoal poultices were applied, and the wound was freely irrigated with warm carbolic solution (1 in 40). The abdomen remained soft and free from pain. On February 9th the wound was again healthy and clean, the temperature being 99°; from that time convalescence was steady, and healing went on rapidly. The patient was able to get out of bed on February 28th.

On March 20th the ligatures had not yet come away from the pedicle, but with the exception of the small sinus thus left the wound had entirely healed, and the patient was gaining flesh and strength daily. From fifty to fifty-six ounces of urine were passed daily. During the first week, while the wound was septic, a bed-sore formed over the right sacral region, which gave rise to a good deal of trouble and discomfort, but which was healing rapidly.

When examined on April 10th the patient was in excellent health.

Remarks by Dr. Colquhoun.—The diagnosis of this case presented no particular points of difficulty. The previous history of calculus, the absence of cystitis, the occasional acidity of the urine, the appearance and disappearance of pus, and the pain in the region of the left kidney, all indicated that the left kidney was the source of the pus, and that it was probably due to the presence of a calculus. The next question that arose was as to the condition of the right kidney. The absence of albumen, when pus was not present, was considered to be satisfactory on that point, and it was thought to be very probable that the right kidney was, and had been for some time, doing the main part of the work, and that little extra burden would be thrown on it by removing its diseased fellow. The age of the patient made the operation a serious one, considering the mortality that had followed such operations in patients of middle life. Mr. Barker stated at the Congress of 1881 that out of ten cases of nephrectomy for calculus collected by him, seven had died, and all the recoveries had been in patients under twenty-four years of age. In this case, however, the peculiarly good physique of the man, the absence of any constitutional weakness, and a previous life of strict temperance in a healthy climate, made the patient a good subject for operation in spite of his years. An operation under such circumstances certainly seemed more likely to be successful than in many of the cases of nephrectomy for strumous disease performed on unhealthy and cachectic individuals many years younger. The lumbar incision was chosen in preference to the abdominal, and no regret was felt for this, notwithstanding the difficulty experienced in removing the kidney through a comparatively small aperture. The condition of the kidney bore a strong resemblance to that of a phthisical lung strongly bound down by pleuritic adhesions, it was so strongly adherent to all the surrounding tissues; and there would have been considerable danger of some of the fetid pus escaping into the cavity of the abdomen had the incision been made from the front. The treatment after the operation was mainly directed to keeping the wound clean and to maintaining the strength of the patient. He rallied quickly from the shock of the operation. During the few days of septic trouble brandy was freely given. The bowels were somewhat constipated throughout, but this the patient said was not more than was his habit when he was at work. The calculus externally consisted of phosphates, with no trace of uric acid; no examination of its internal composition has yet been made.

GREENOCK INFIRMARY:

PENETRATING WOUND OF ABDOMEN, WITH PROTRUSION OF STOMACH AND INTESTINES; REDUCTION OF HERNIA AFTER ENLARGEMENT OF WOUND; DEATH.

(Under the care of Dr. DOUGLAS.)

THOMAS C——, aged eight, was admitted on April 18th, 1885. This boy, when bathing in a shallow burn, lay down on his belly close to the bank in order to practise swimming movements. The ragged edge of a broken bottle which lay at the bottom of the burn penetrated his abdominal wall. Saying nothing about his injury, he at once got out of the water, walked to his clothes, put on his shirt and one leg of his trousers, but his exertions caused his intestines to protrude through the wound, and this being observed by his companions; assistance was sent for, and he was at once brought to the infirmary in the ambulance van, being admitted about an hour and a half after the accident.

On admission, midway between the umbilicus and the ensiform cartilage, in the median line, was an incised wound only three-quarters of an inch long, through which had protruded the stomach, omentum, and almost the entire length of the jejunum and ileum. These viscera now lay to the right of the middle line. The stomach and intestines were uninjured, although considerably congested and distended with flatus; the peritoneum covering them was smooth and glistening, and no dirt or foreign body of any kind was adherent. The omentum was slightly torn here and there, and at one part a very small portion of it was almost detached. The neck of the hernial protrusion was firmly constricted by the edges of the wound. The surface of the patient's body was cold; his face pale and anxious-looking, and the pulse slow and feeble. Chloroform was administered, the viscera carefully washed with a weak tepid solution of carbolic acid, and the semi-detached portion of the omentum firmly ligatured with carbolised catgut and removed. Careful attempts were then made to return the hernia, but, as was expected, they proved of no avail, so the wound was enlarged upwards and downwards about half an inch in each direction, and the whole protrusion was then returned with comparative ease. The edges of the wound were stitched accurately together with sulpho-chromic gut, a drainage-tube inserted at the lower end, and a dressing of protective carbolic gauze and carbolised wool applied. The carbolic spray was employed during the operation. He was ordered small quantities of brandy and iced milk.

19th.—Slept fairly well during the night; micturated freely; complained of no pain; pulse rapid and feeble. Temperature in rectum 100·8°. The following was ordered: solution of morphia and simple syrup two drachms of each, distilled water two ounces; one drachm every two hours. Incessant vomiting and hiccough began shortly after mid-day; he gradually sank, and died at 9.30 P.M., thirty-two hours after admission.

The wound was reopened and enlarged after death. No hæmorrhage had taken place; no peritonitis; the viscera had exactly the same appearance as before their return into the abdominal cavity. There was no attempt at healing of the wound.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Fatty Tumours.—Lympho-sarcoma of Tongue.

THE last meeting of the session of this Society was held on Tuesday last, Dr. George Johnson, F.R.S., President, in the chair. At the close of the meeting the President said that the ventilation of the room in which the Society met would undergo a thorough revolution during the vacation.

Mr. BLAND SUTTON read a paper on Fatty Tumours, the object of which was to endeavour to point out the probable origin of certain forms of fatty tumours which occur in unusual situations. The author removed the biceps cubiti muscle of an old woman, a dissecting-room subject, the upper part of which had become metamorphosed into a lobulated fatty tumour; it was not merely an example of fatty degeneration of a disused muscle, but a genuine lipoma. Mr. Pearce Gould removed a congenital fatty tumour from the clavicle of a child, the base of which contained striated muscle fibre. Mr. Butlin reported a similar case in the twenty-eighth volume of the Pathological Society's Transactions. The patient, a girl seven years old, was operated on by Mr. T. Smith for a fatty tumour growing among the deep muscles of the calf. It contained striated muscle fibre. In a fibro-muscular tumour of the uterus, removed by Sir J. Paget, and reported in the twelfth volume of the same Society's Transactions by Mr. T. Smith, a fatty tumour was found of the size of a pigeon's egg. These four cases seem to favour the view that the muscle-tissue had suffered fatty degeneration, and the retrograded elements had acquired, or assumed, an independence and grown into a tumour. Muscles do not stand alone in this respect. Inflammatory new formations may degenerate into fat and become veritable fatty tumours. Dr. Norman Moore presented to the College of Surgeons Museum a ureter surrounded by a "fatty tumour." The ureter contains a calculus, and in the catalogue is printed the following noteworthy explanation: "The fat was probably produced by fatty degeneration of newly formed fibrous tissue (inflammatory new formation) occasioned by irritation of the calculus." The museum of the Middlesex Hospital contains a specimen illustrating syphilitic stricture of the rectum; the pelvic organs are embedded in a mass of fat, tunnelled with sinuses from the bowel. Possibly the stricture and the passage of fæcal matter outside the bowel had acted as irritants, leading to increased activity in the parts surrounding the gut, which fell just short of inflammation and led to overgrowth of fat, or in the early stage of the stricture inflammatory products were exuded, which later retrograded into fat and took on independent growth. Dr. J. K. Fowler pointed out the condition to the author, and stated that it occurs in many cases of long-standing stricture of the rectum. In November, 1876, Mr. Henry Morris removed from the buttock of a man a fatty tumour containing a shapeless mass of bone. Careful examination of this and similar tumours, particularly a case described in the thirty-third volume of the Pathological Society's Transactions by Mr. F. Treves, lends support to the notion that congenital fatty tumours containing bone are really examples of "parasitic fœtuses whose soft parts have retrograded wholly or partially into fat." The question is also borne out by numerous examples in pathology and comparative anatomy. The fatty contents of dermoid cysts may be explained in the same way—viz., degeneration of the higher tissues of which it was originally composed. The "lipoma arborescens" of Müller doubtless arises by fatty retrogression of the villous processes, which are so common in joints affected with chronic disease. Evidence in many ways is adduced in the paper to prove that any of the soft tissues of the body, normal or pathological, may degenerate into fat, and that this retrograded tissue does, in some instances, assume an autonomy and grow into a veritable fatty tumour. — Mr. BUTLIN said that, working at lipomata of infancy and childhood some years ago, he had come to the conclusion that they might arise as degeneration of fibrous tissue. He thought that Mr. Sutton had extended these views, and with a considerable show of truth.—Dr. CREIGHTON considered that Mr. Sutton had hardly proved his point. He said that the notion that such congenital fatty tumours were parasitic fœtuses was far-fetched. In dermoid cysts no doubt there was a greasy substance; but this was due to the existence of an enormous number of sebaceous glands. Throughout the paper fat was spoken of as degenerate tissue, and Dr. Creighton objected to such a view. The paper did not state where the fat occurred precisely in the tumour of the biceps cubiti muscle, and there was no histological description. He believed that it was just as likely that we had to do with a congenital rudiment of fat in cases of congenital fatty tumour. When fat forms in the intestine, in the tract of an old hernia, he had found that the fatty change proceeded in the most orderly way, and without preceding inflammation.—Mr. BLAND SUTTON, in reply, argued that fœtuses did remain at their autosite, and gave several illustrations: one, that of a rudimentary fœtus on a man aged thirty, in which the fœtus moved its stunted and rudimentary limbs; and another case in which the fœtus was attached to the breast. The fatty material in dermoid cysts was no doubt of two kinds: the one was a fluid sebum; the other was unquestionably fat and a genuine adipose tissue. His paper was simply an earnest endeavour to give some satisfactory explanation as to how fatty tumours may arise in such untoward situations in which we sometimes find them.

Mr. Jonathan Hutchinson read a paper on a case of large Lympho-sarcomatous Tumour of the Tongue. The paper consisted chiefly in the narrative of a case in which a tumour, beginning in early life in the substance of the tongue, had required removal on account of its large size. It had grown until it completely filled the mouth and obstructed deglutition and respiration. It weighed after removal seven ounces, being probably the largest tumour of the tongue on record. The operation necessitated a preliminary tracheotomy and section of the lower jaw at the symphysis, since it was quite impossible to get at the mass from the mouth. The patient was a medical student, aged twenty-two, and the tumour had been growing for twelve years, or possibly much longer; it was painless and of almost stony hardness. Its surface at one part was covered with papillary outgrowths, but there was not the least tendency to ulceration. There was no gland disease. The patient was in good health, and the inconvenience caused by the size of the tumour was the only reason for its removal. Careful microscopic examination had been made by Mr. Eve, Dr. Klein, and others, with the result that the tumour was declared to be of a sarcomatous or lympho-sarcomatous nature. This verdict had unfortunately been supported by the final result, for after about two years of good health, without the slightest symptom of recurrence, a new growth suddenly developed in the scar, and, increasing very rapidly, brought about the patient's death. The author, whilst admitting that the tumour in its final development was of a malignant or sarcomatous character, drew attention to certain clinical features which were different from those common to such growths. If not actually congenital, it had begun in very early life, and its growth had been very slow and absolutely painless. The development of coarse papillæ on its surface, without any tendency to ulcerate or fungate, was another feature of peculiarity. He had not been able to find on record any case which corresponded with his own in all its characters, but had met with several which resembled it in its early stages. In one of these, in which a portrait was shown, the appearances on the surface were exactly similar; but in this no tendency to persistent growth was shown, and the patient, a railway porter, aged twenty-three, is still free from any material inconvenience. This and some other cases led the author to believe that the starting-point had been of the nature of a congenital mole, in which other morbid tendencies had been developed later on. The paper was illustrated by a series of drawings, and by the preparation itself, which had been preserved in the museum of the College of Surgeons.—Dr. Johnson congratulated Mr. Hutchinson on the temporary success which had attended the surgical interference.

Mr. Hutchinson showed a living specimen of Papillary and Nævoid Mole of the Tongue in a railway porter. There was hypertrophy of one-half of the tongue with, in addition, papillary growths all over the organ and enlarged veins. The growth had certainly diminished during the last year or so. — Mr. Butlin had investigated the literature of the subject of sarcoma of the tongue, and so far as he could make out there was but one on record besides that related by Mr. Holmes. He thought that Mr. Hutchinson was probably right in believing that the growth had arisen in some other tissue. It was not an ordinary round-celled sarcoma, and Mr. Hutchinson's view as to the origin must be accepted. He remembered the case of a little girl under the care of Mr. Howard Marsh, in which there was a papillary growth on the tongue and the disease spread through that organ. Certainly Mr. Bryant had shown that such growths might be due to the degeneration of a nævus, for Mr. Bryant saw one case pass through the various stages. If a further proof of the nævoid character were wanted, it would be found in the profuse bleeding, which was with much difficulty controlled in one case operated on by Mr. Butlin. Mr. Hutchinson's case was most probably one of a congenital condition of the tongue which had undergone cystic and papillary degeneration, and in this degenerated tissue a sarcoma had developed. The case was one of surpassing interest.—Mr. Howard Marsh said that he had seen three cases of a nævoid condition of the tongue at the Hospital for Sick Children. In two of these the patients were about three months old. It was interesting to know that such nævi did take on a coarse papillary degeneration.—Mr. Barker had seen one more case than those he had put on record—that of a young woman aged twenty-one, in whom there appeared to be a rather larger admixture of the nævoid condition than existed in Mr. Hutchinson's case. The papillæ appeared to be made up of saccules, which, on incision, gave vent to serous fluid. A lymphangiectatic condition was probably also present in these cases. Injection could be performed from the lymphatics into the veins, and *vice versâ*. Setons had been used, with the result of setting up glossitis; and an incision into the inflamed area did not give rise to much bleeding, though there was a considerable escape of a clear fluid. — Mr. Hutchinson did not accept the limitation of the tumour to the class of nævus only; he considered that there was the "mole" element—that is, a hypertrophy of the various tissues. Mr. Arnott had described enlargement of the lymphatics, as well as all the other tissues, in a case of the kind. He did not think that such cases always began as a nævus. In many cases there was hypertrophy of all the solid tissues.

OPHTHALMOLOGICAL SOCIETY.

Congenital Changes in Vitreous Body.—"Black" Cataract.—Nævoid Conditions of Eyelids and Orbital Tissues.—Intraocular Gumma.—Double Retinal Glioma.

An ordinary meeting of this Society was held on the 4th inst., Mr. H. Power, F.R.C.S., Vice-President, in the chair.

Mr. Lang showed a specimen of Congenital Changes in the Vitreous Humour with choroiditis and atrophy of the optic disc.—Mr. H. Power asked for what reasons the changes were considered to be congenital.—Mr. H. E. Juler suggested that there had been an inflammatory process which had left behind it the fibroid changes; the lesions were not the remains of the hyaloid artery.—Mr. Lang said that the sight of the right eye had always been defective; the left eye was normal. By direct inspection three branches could be seen, one of which passed vertically upwards and another horizontally inwards; he thought it could not be the remains of an artery, and suggested that an intra-uterine inflammation was the cause: there was also choroiditis of extensive nature; the optic disc was decidedly grey, and much darker than in ordinary grey atrophy. In answer to Mr. Power, he said there was no specific history.

Mr. H. Power showed a specimen of "Black" Cataract, which was the only one that had occurred in his own practice. Mr. Myrtle, at the Western Ophthalmic Hospital, had informed him that he had seen three black cataracts in Paris during a period of six months. Mr. Power's case was that of a woman aged forty-three, in whom the field of vision was good in all directions, though feeble. The lens was removed without iridectomy, and the cataract came away in the capsule. The result would in all probability be very good.—Mr. Swanzy had seen many black cataracts both in von Graefe's and his own practice. The result of their extraction was rather unsatisfactory in his experience.—Mr. Lang referred to two cases which had been under his care. In one there was extensive myopia and mixed astigmatism; the patient did well for a time, but subsequently detachments of retina came on and useful vision was destroyed. He had seen another case at Moorfields also in a myopic patient.—Mr. Juler remarked on the large size of the lens in Mr. Power's case, and thought that the eye ought to have been glaucomatous were it not for the myopia.—Mr. Nettleship had seen many cataracts of a brown tint, but none actually black; he referred to Mr. McHardy's case, published in the second volume of the Society's Transactions.—Mr. Mackinlay had seen a few cases of black cataract.—Mr. Adams Frost remarked on the obscure nature of black cataracts.—Mr. Henry Power suggested that absorption of hæmoglobin might account for the colour, and thought a chemical examination might clear up this point.

Mr. McHardy showed a girl with a Subcutaneous Nævoid Condition of the Eyelids, which was attended with alterations in the temporal bones. There was no proptosis; the eyeball appeared to be unaffected.—Mr. Spencer Watson referred to a case of nævus of the orbit, orbital tissues, and upper lid, which did not extend so far into the temporal region as in Mr. McHardy's case. He had used ligatures to tie portions of the growth in the lids and the actual cautery for the orbital portions; by these means he had obtained a good result. He thought Mr. McHardy's case not so favourable for operation, and yet he suggested that some of the vessels might be tied up.—Mr. H. Power had seen many cases of nævus of the eyelids, and referred especially to the case of a child aged between three and four years, in which he had twice used a deep figure-of-8 ligature, with success at the second operation. He mentioned another case in which a nævus was rapidly growing at the inner canthus and caruncle of the eye and had penetrated into the orbit; this was in a female infant aged eight months. He dissected out the growth with some difficulty after separating it from the conjunctiva; there was some hæmorrhage, and the operation had to be more extensive than he had anticipated.—Mr. Nettleship referred to a case of "lymphatic" nævus in a boy, in whom there was defective vision; nothing was done; an attack of spontaneous inflammation led to no improvement. He considered that Mr. McHardy's case was one of nævus; large cords passed through the growth, which were apparently obliterated vessels.—Mr. Jessop referred to the enlarged veins and cords passing apparently into the external jugular veins.—Mr. Waren Tay asked whether the choroid was affected.—Mr. McHardy said that the choroid was probably free; there was some hypermetropia about 2 D. The growth did not dip into the orbit very much, for there was no exophthalmos. He mentioned a case in a boy aged fifteen, in whom proptosis was a marked feature; he thought he should deal first with the isolated mass in the lower lid, and then proceed to remove a portion from the upper eyelid.—Mr. Adams Frost referred to a case on which he had operated, and said that the skin never resumed its natural texture; in this case the tumour went deeply into the orbital tissues.

Mr. Jessop read the report of the Committee on Mr. Benson's case of Growths on the Cornea and Iris. It was found that the nodules on the cornea were chiefly situated external to the posterior elastic lamina. The nodules consisted of round nucleated cells, which stained deeply; in some spots there were signs of disintegration. There was practically no caseation. No giant cells were found anywhere. No reticulated structure and no bacilli were detected. The growths in the inoculated animals had the same characters. This was not a case of tuberculosis, as the above facts showed, and as was further borne out by the fact that there was no evidence of general tuberculosis in rabbits inoculated into the anterior chamber of the eye.—Mr. Swanzy asked the Committee what kind of growth they regarded it as.—Mr. Jessop, in reply, said some form of granuloma, possibly syphilitic.

Mr. Spencer Watson read a paper on a case of Intra-ocular Gumma in a child aged six years, whose history pointed to inherited syphilis. The father was the subject of phthisis. The patient came to the South London Ophthalmic Hospital with a protrusion of the upper and outer quadrant of the sclerotic. This was punctured, and on it, though no pus escaped, a prominent growth of lympho-pus formed. The earlier stages had resembled those of acute onyx with hypopion, but after the formation of the protrusion in the sclerotic the pus in the pupillary area disappeared. Under a course of mercury the protrusion subsided, leaving a pigmented scar in its place, and a shrunken eyeball. All the other symptoms also were ameliorated, and the child's general health improved. The whole case seemed to indicate an intr-ocular syphiloma. At one time the sympathetic irritation of the sound eye threatened danger to it also, but the mercurial course had a good influence, and, as the damaged eye contracted, the fellow eye lost all irritability and the general health correspondingly improved. This form of syphilitic affection of the eye is, according to the author's experience, very uncommon.—Mr. Adams Frost referred to a case of gumma on the anterior surface of the iris which was absorbed under mercurial treatment; the other eye was symmetrically affected.—Dr. Brailey referred to cases of gumma of the choroid which he had seen, none of a large size. He mentioned cases of tubercle, in one of which the sclerotic was perforated and a suppurative panophthalmitis resulted. In a case of glioma with increased tension a tuberculous mass growing from the optic disc was found. He thought there was evidence to show that genuine glioma does shrink.—Mr. Nettleship had not seen intra-ocular gumma in a child, but had seen many in adults, where there was no doubt as to the acquired syphilis. He remembered very well two cases in women with severe secondary syphilis, and each lost one eye. In one the disease led to the formation of a bulging mass in the ciliary region, which tended to perforate and was broken down in the centre. In another case in a lad it was doubtful whether the growth was syphilitic, tubercular, or of some other nature.—Mr. Lang spoke of a case in a man with acquired syphilis; the gumma was situated on the anterior surface of the iris and perforated the sclerotic. In another instance the gumma separated the iris from the sclero-corneal junction and bulged the sclerotic forwards.—Mr. Power said that it was the early age of the patient which was the interest of Mr. Spencer Watson's case. In adults syphilitic affections of the iris were very common, especially at Chatham, where, the Contagious Diseases Acts not being in force, he had seen numerous examples.—Mr. Spencer Watson said that the mother showed no evidence of syphilis till after the birth of the child; and he suggested that the fœtus was primarily affected, and that the mother was infected from the fœtus.

Dr. Brailey described a case of Double Retinal Glioma, which resulted in the shrinking of one eye and the perforation of the anterior part of the opposite eye by a large projecting mass of new growth. He first saw the child, who is still living, in October, 1882, when there appeared at the fundus of the left eye a yellowish-red vascular reflex. The right also showed a greyish reflex, with a few vessels on it. The disease was diagnosed as glioma, the condition being more advanced in the left eye, where it implicated the entire retinal thickness, and of comparatively short duration in the other, where it was apparently confined to the external retinal layers (glioma exophytum). In the diagnosis of glioma Mr. Vernon concurred. The disease progressed slowly for ten months, when the right eye was apparently the seat of an acute suppurative panophthalmitis, during the progress of which the child lay for several days in a state of stupor. Dr. Brock of Tooting, under whose care she was, attributed this condition to meningitis. Two and a half years from the time of her being first seen the tumour perforated the left eye and projected for about three-quarters of an inch as a rounded mass, about half an inch in diameter, from between the lids. There was at present no evidence of any further extension of the disease. Dr. Brailey thought that the points of interest in the case were its long duration, and the fact that an intra-ocular glioma could shrink and become inert. He referred to such a case recorded by Mr. Snell in the Society's Transactions for 1884, to which he had himself appended another; but in neither of these did the shrinking appear to be the result of a suppurative panophthalmitis. Another point of interest was the probable mode of extension of the disease from one eye to the other. He thought that this, in some cases, at all events, was by the optic nerves and chiasma.—Mr. Power had seen but one case of glioma in both eyes; in this case, and against his wish, no operation was performed, and the child died in great misery.—Mr. McHardy spoke of a case of double glioma in which one eye was removed, but the parents refused to have the other touched. The growth at death weighed 8¼ lb., and the child only 24 lb.—Mr. Francis Mason also spoke of a case of double glioma. One eye was removed, and the further growth in the orbit of that side certainly shrank, whilst the glioma of the other eye went on enlarging.—Mr. Adams Frost thought that, as the growth extended along the optic nerves, removal would prove useless in established cases.—Mr. Swanzy spoke of a case of double glioma which had not extended from one eye to the other, but had appeared independently in each eye. He mentioned a case in which the glioma lasted two years before the disease became extra-ocular, and agreed with Dr. Brailey that gliomata were not always rapid in their growth.—Mr. Power thought it would be important to know whether early removal prevented recurrence in other organs.—Mr. Nettleship referred to a case in which he had removed the eye at an early period and no recurrence had taken place after three years, and Mr. Brudenell Carter had put on record a case in which certainly eight years elapsed without recurrence.—Dr. Brailey had seen altogether twenty cases of ordinary glioma, five of which recovered after excision.—Mr. Lang gave an instance showing that growth may occur in the second eye without extension by the optic nerve.—Mr. Waren Tay referred to a case, probably a glioma, in which there had been no recurrence after eight years.

HARVEIAN SOCIETY OF LONDON.

At the meeting on May 7th, the President, Dr. T. Morton, in the chair,

Dr. M. Handfield Jones read the notes of a case of Porro's Operation. The patient, a single woman, aged thirty, had come to him complaining of a lump in her abdomen; about four months previously she had had an acute attack of pelvic pain, following violent exertion, and accompanied with constipation and great frequency of micturition. Since the attack her courses had stopped, constipation had been very troublesome, and the general health had deteriorated. Physical examination revealed the existence of pregnancy, complicated by a large fibroid tumour impacted in the pelvis, and leaving only a small chink between its anterior surface and the symphysis pubis. At the time of labour it had been found possible to dislodge the tumour under an anæsthetic to such a degree that the performance of craniotomy was deemed advisable; this however failing, the abdomen was opened and the child removed by uterine incision. Then the tumour, being freed from adhesions which bound it to the pelvic wall, was raised out of the pelvis and removed with the uterus. The patient rallied well from the operation, but succumbed on the third day from peritonitis.

Dr. De Watteville read a paper on Electrical Diagnosis in Nervous Diseases. After showing some of the recent improvements effected in electro-therapeutic instruments, he spoke of the method of conducting an investigation of the reactions of nerves and muscles. He then dwelt at some length on the phenomena observed in various forms of facial paralysis. Ordinary facial paralysis from "cold" offers three types of intensity; and an accurate prognosis may often be based upon the results of an electrical investigation; and recovery may be predicted within one, two, or six months respectively. He then explained the relationships between the "reaction of degeneration" and the morbid changes in the nerves and muscles; and he pointed out how the latter depended upon an *interference* with the "*trophic*" *influence* of the motor nuclei. The division of paralyses into "cerebral" and "spinal" (Marshall Hall) is of value if, by these terms, we denote the fact that in some the muscles are cut off from the brain influence only; while in the others the spinal (trophic) influence is also cut off. Progressive muscular atrophy, poliomyelitis, and "wrist drop" from lead or from pressure on the musculo-spiral nerve, were briefly alluded to as offering many opportunities for clearing up doubtful points and framing a prognosis by means of an accurate investigation of the behaviour of nerves and muscles to faradism and to galvanism.

ACADEMY OF MEDICINE IN IRELAND.

At a meeting of the Obstetrical Section on March 6th,

Dr. More Madden exhibited Five Uterine Tumours which he had recently removed from patients in the Mater Misericordiæ Hospital, and read a paper on the Treatment of Uterine Fibro-myomata, as exemplified in his own gynæcological hospital practice during the past fifteen years. In this communication the author described fully his method of removing uterine fibromata by enucleation, and also referred to Emmet's operation for the same purpose, as well as to the treatment of uterine tumours by abdominal hysterectomy, myotomy, and oöphorectomy.—Dr. Kidd agreed with Dr. More Madden that the prevailing epidemic of laparotomies needed to be stayed. Capital operations should only be performed when the risk to life was imminent. The treatment required would vary with the size of the tumour—submucous, interstitial, or subserous. If necessary, the first two classes of uterine myomata might be removed by enucleation. The submucous variety caused most trouble and danger to life through accompanying hæmorrhages, but interstitial tumours might grow towards the mucous surface, and so become practically submucous. In the same way these tumours might become subserous. The latter class very seldom gave rise to really threatening symptoms such as alone would justify serious operations being undertaken for their removal. Mere inconvenience and some amount of pain would not justify laparotomy. Serious difficulty in defecation rarely occurred in connexion with these tumours, but micturition might be so difficult as to call for the use of a catheter. He had generally found it possible to relieve such symptoms by lifting the tumour out of the pelvis. He knew many cases in which very large uterine tumours had existed for many years without giving rise to any real danger to life, even though the abdominal and thoracic viscera were much pressed upon and displaced.—Dr. Macan said that everyone would agree that in the absence of proper indications serious operations should not be undertaken. This rule was obvious; but enucleation as an operation he regarded as infinitely more dangerous than laparotomy. Nor did he accept Dr. More Madden's faith in the efficacy of subcutaneous injections of ergotin. Schroeder had laid down very clear rules and indications for the performance of myomotomy. It was called for in the case of a rapidly growing tumour in a young woman, when it gave rise to symptoms from mechanical pressure or excessive bleeding, or when it interfered with the patient's power of earning her bread. Other indications sometimes requiring operative interference were, according to Schroeder, complication with ascites or with pregnancy. Another rarer indication consisted in evidences of sloughing of the tumour. Removal of the ovaries might in many cases be preferable to myomotomy, but Battey's operation was very difficult and sometimes almost impossible in the cases of large tumours. It would be erroneous to say that menopause held out certain prospects of the cessation of the growth of uterine tumours.—Dr. Byrne thought that the dangers of uterine tumours complicating pregnancy had been overrated. He believed with Dr. Kidd that the more serious operations were very seldom required.—The President pointed out that all of the tumours presented by Dr. More Madden except one were intra-uterine and pedunculated. He entirely differed from Dr. Madden in his estimate of the difficulties and dangers of enucleation. More difficult and less successful operations he had never performed. In his experience enucleation was most often left unfinished. He had some time since made up his mind never again to attempt this operation, except upon examining the uterus he found the tumour so circumstanced as to lead him to think that it would come away very easily. Myomotomy he looked on as a very dangerous operation, and not to be undertaken without the clearest indications. Death from pressure or from bleeding was very exceptional in these cases. He had entirely lost faith in subcutaneous injections of ergotin. It could only be of possible use in the case of intramural tumours. He had lately practised incision over the tumour, with subsequent injections of iodised phenol into the cavity of the uterus at fortnightly intervals, with very distinct advantage.—Dr. Purefoy having spoken, Dr. More Madden replied, and the Section adjourned.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

At a meeting of the Society on April 23rd,

Mr. Atkin showed microscopical specimens of a Calcified Enchondroma of the Cerebellum which was accidentally discovered during the post-mortem examination of a boy who died of meningitis following otorrhœa.

Mr. F. Woolhouse related particulars of a case of Hysterectomy in which a large uterine fibroid was removed with the body of the uterus and appendages. The patient, single, aged forty-three, had noticed as long ago as eight or nine years an enlargement in the lower part of the abdomen and on the left side, and this had gradually increased, and latterly had become so painful as to render life almost unbearable. When seen in December, 1884, a rounded smooth movable tumour was found, about the size of a uterus at the seventh month of pregnancy. Operation was performed on February *19th, 1885, and removal* of the tumour was effected by taking up the uterus at the junction of the body with the cervix in segments, and tying each with strong catgut ligatures and cutting through about half an inch above. The edges of the stump were drawn together and dropped into the pelvis. The operation was performed without the spray. The after-progress was detailed. The chief difficulty experienced was the severe gastric disturbance, the patient being unable to take any food by stomach without pain. There was a history of dyspepsia of several years' standing. On March 18th she had an attack of hæmatemesis, vomiting a large quantity of blood, and died the next day. At the post-mortem the external wound was found perfectly healed, and the surface of the stump (cervix uteri) was cicatrised over. The stomach was filled with blood, and a large perforating ulcer was found in the posterior wall adherent to the pancreas, which had evidently prevented extravasation into the abdominal cavity. The specimens were exhibited.

Dr. BANHAM introduced a boy, aged thirteen, suffering from Pseudo-hypertrophic Paralysis, in whom there was marked hypertrophy of the muscles of the calf and buttock, and equally striking atrophy of the muscles of the chest and shoulder, especially the pectoralis major. The weakness of the legs, which was first noticed when he was six years old, had been progressive since that time. The arms had been similarly invaded, and now there was as complete a paralytic condition as is usually met with in the most advanced stages of the disease. No passive exercise having been had recourse to, and the legs remaining constantly in a flexed position, contracture had taken place in the hamstring muscles, and the knee-joints also were considered to have undergone some change. These conditions, whilst they added greatly to his helplessness, had also doubtless favoured degenerative changes. The patellar-tendon reflex was absent, and powerful faradaic currents elicited no response on the part of the calf muscles. There was, however, a feeble contraction of the gastrocnemius on the making of kathodal and anodal currents of ten milliampères. Microscopical examination of a small piece of muscle that had been harpooned from the gastrocnemius revealed the usual excess of interstitial connective tissue.

Dr. DYSON showed the Spleen and Heart from the case of Leucocythæmia which he had exhibited at the Society on March 12th. The patient died on April 17th, after diarrhœa, general anasarca, and great asthenia had supervened; coma suddenly came on half an hour before death. At the post-mortem the abdomen was found to contain a large quantity of greenish-turbid fluid. The spleen weighed 2¼ lb.; the capsule was thickened, and on the surface were three white not raised patches, and on section these were found to be white in colour and triangular in shape, the apex being inwards; they were probably old hæmorrhagic infarcts; the rest of the splenic tissue had the usual features of hypertrophy. The liver weighed 3¾ lb.; a small, whitish leukæmic patch was seen in the left lobe. Lungs healthy. Kidneys large and pale on section, calyx diminished, and capsule adherent; there was a small cyst in the right kidney. The muscular tissue of the heart was pale and thin; the sulci (auriculo-ventricular and interventricular) were occupied by a somewhat firm gelatinous tissue, composed chiefly of lymphoid tissue. The lymphatic glands were healthy, except the post-bronchial, which were pigmented and many calcareous.

Reviews and Notices of Books.

Nouveau Dictionnaire de Médecine et de Chirurgie Pratiques. Directeur de Rédaction Dr. JACCOUD. Tome XXXVI., 1884 (TR—TYPHO), and Tome XXXVII., 1885. Libraire J. B. Baillière, Rue Hautefeuille, Paris.

THE thirty-sixth volume of this fine dictionary contains the following chief articles:—Trachea and Tracheotomy, by L. Dubar; Transfusion, by Oré; Tremblement, by Picot; Trepan, by Poulet; Trophoneurosis, by Leloir; Tubercle and Tuberculosis, by Hanot; Tumour, by Heurlaux; Tympanites and Typhlitis, by Lutoy; Typhoid Fever, by Homolle and Dreyfous. The thirty-seventh volume contains Typhus (Typhus Exanthematic, Recurrent Fever), and Cerebro-spinal Meningitis, by E. Richard; Uræmia, by Labadie Lagrange; Urethra, by Bouilly, Guiard, and Janin; Urinary Passages, by Bouilly; Urine, by Danlos, Charpentier, and Schwartz.

We naturally turned with interest in the first instance to Dr. Leloir's essay on Trophoneurosis, one of the most recent chapters added to pathology. Dr. Leloir coincides with Charcot that nothing is better established in pathology than the existence of trophic troubles consecutive upon lesions of the nerve centres or of the nerves. The tissues and organs in which these effects have been most distinctly shown are the skin, the muscles, the bones, and the joints; but M. Leloir limits his observations in this article to the trophic lesions of the skin. He commences by pointing out the intimate relation that exists between the nervous system and the skin in regard to their origin, both being developed from the epiderm, and then takes up in succession chronic erythema and superficial dermatitis; vesicular affections, such as certain forms of eczema and herpes; bullæ, including certain localised bullous eruptions and certain forms of pemphigus; pustular affections, including certain ecthymas; ulcerations, including the perforating disease and some little slender forms of trophic ulceration; gangrene; scleroderma; morphœa; facial trophoneurosis; lepra; certain forms of ichthyosis; disturbance of the pigmentary cells of the skin in the direction of excess or diminution, and vitiligo; and finally, lesions of the cutaneous appendages, as the nails, hairs, and sudoriparous and sebaceous glands—a large list, considering that it is but a few years ago since the first cases in which the connexion between the nerves and the skin were adduced by Paget, Weir Mitchell, Brown-Séquard, Charcot, and Bärensprung. The article on Tumours, though of considerable length, is materially reduced from the circumstance that many of the forms are described under their proper names in other volumes. Nearly half of this volume is occupied with the subject of Typhoid Fever, the article upon which has been written by M. Homolle, and gives a thoroughly reliable account of this disease. M. Homolle dwells strongly on the means of disinfection that should be adopted in hospitals, giving his adhesion to the methods recommended by MM. Besnier, Lucas-Championnière, and Baudrimont. Good sections are devoted to antipyretic and antithermic treatment.

The thirty-seventh volume is chiefly occupied with the consideration of five subjects—Typhus, Uræmia, Urethra, Urine, and Uterus. The article on Urine is by M. Danlos, and is a treatise in itself, occupying, with the remarkably complete bibliography of recent works with which it closes, no less than 250 pages. Commencing with Hippocrates, some of whose aphorisms are still pertinent, the author gives a succinct historical review, from the date of that physician downwards, of the advances of our knowledge. The changes which the urine undergoes even in health, and more especially in disease, have always rendered it a favourite study, and, according to Leube, from the time of Magnus of Alexandria to the close of the last century no less than 200 treatises were written upon it; whilst in M. Danlos' bibliography, which includes only the treatises and papers published from the year 1850, upwards of 600 are mentioned. The plan pursued by M. Danlos is that a short account of the physical and chemical properties of urine as a whole is first given, the several constituents are then described separately, and the changes in their quantity or nature effected by disease fully discussed. Throughout the practical side of the subject is considered, the very proper view being taken that the article is written for a Dictionary of Medicine and not for a treatise on physiology. As an example of the mode in which M. Danlos treats contested points, we venture to abstract a part of the section which deals with the changes taken place in the urea after urine has been passed. The formation of ammonium carbonate from urea by the action of acids and alkalies is of course well known, and is due to the urea taking up two equivalents of water.

> "The hydration of urea may proceed in a very different manner, which, however, is full of interest to the physician. Dumas in 1830 gave the chemical equation representing the process. In 1843 Jaquemart, one of his pupils, observed that the deposit which occurs in ammoniacal urine is a very active agent in decomposing healthy urine. This was confirmed by Muller in 1860. Pasteur was the first to recognise, in his celebrated memoir on Spontaneous Generation, the presence of a low organism which he suspected to be the agent of ammoniacal fermentation—a theory the truth of which was demonstrated

by Van Tieghem. The parasite is a torula, named by Koch the micrococcus ureæ. In urine undergoing free fermentation it forms elongated chaplets composed of spherical globules, with a diameter of 0·0015 mm. Light exercises a certain influence on its development, for the side of the vessel turned towards the light is always covered with a more abundant parasitic vegetation than the opposite. The parasite grows and multiplies in highly alkaline media. It develops in a culture fluid containing, in addition to urine, yeast or phosphates, as freely as in urine. Fermentation may proceed in the fluid so long as the quantity of ammonium carbonate does not exceed 13 per cent., according to Van Tieghem. When the process is ended, the chaplets break up, and their elements fall to the bottom of the vessel in the form of exceedingly minute spherules, mixed with ammonium urate and ammoniaco-magnesian phosphate. The ferment of urea exists always and everywhere in the air, though often mixed with other organisms. The truth of this theory has been contested by Musculus, who has shown that a soluble ferment can be extracted from urine capable of converting urea into ammonium carbonate. To obtain it, it is sufficient to precipitate the putrefied urine of a patient affected with vesical catarrh with alcohol, and to collect the precipitate on a filter and dry it. On the addition of water, a substance is dissolved which rapidly destroys urea. Pasteur and Joubert have verified the truth of the statements of Musculus, and shown that the contradiction is only apparent. They have demonstrated that the torula pre-exists in all cases where the soluble ferment occurs, and that this may be regarded as the product of plant life, just as the gastric juice is the product of the cells of the gastric follicles; and it hence follows that the fermentation of the urine is a kind of diastase."

M. Danlos then briefly discusses the statements of Neubauer, Miquel, and Bouchard, and shows how the introduction of unclean instruments may induce decomposition of the urine in the bladder itself. Under the head of each constituent of the urine the quantitative and qualitative tests are given, and the characters of the urine in various diseases are recorded at length. The section on the Uterus, which runs to 340 pages, is divided into several subheadings, of which that dealing with its embryology, vices of conformation, and lesions, has been committed to the charge of M. Charpentier, the anatomy and operations to M. Schwartz, and the pathology to MM. Siredey and Danlos. The serious operation of removal of the uterus seems to have been fairly successful in France; thus Demons reports seven operations with three deaths; two cases remain well after eighteen months, and two have had relapses.

Clinical Lectures on Scrofulous Neck. By T. CLIFFORD ALLBUTT, M.A., M.D., F.R.S., Consulting Physician to the Leeds General Infirmary; and *On the Surgery of Scrofulous Glands.* By T. PRIDGIN TEALE, M.A., M.B., Consulting Surgeon to the Leeds General Infirmary. London: J. and A. Churchill. 1885.

WE are very glad that these two clinical lectures, each the complement of the other, have been published. They deal with a subject which is full of distressful interest to all practitioners in this country; and no men enjoy the confidence of the profession more thoroughly and more worthily than Dr. Clifford Allbutt and Mr. Pridgin Teale. Dr. Allbutt deals with the pathological side of the question, the causes, course, and possible consequences of scrofulous glands. He lays stress upon the origin of the disease in trivial local conditions unperceived at the time, and soon forgotten, and upon the spread of the infection from gland to gland. The disastrous effects of the disease are not limited to the mere local inflammation and destruction of tissue, but include also slow chronic septic infection, and probably also tubercular infection. While clearly indicating the appropriate treatment in the earlier stages of the malady, the chief purpose of the opening lecture is to advocate thorough surgical interference in all cases of suppuration and evident caseation of the glands. Mr. Teale develops this part of the subject, and describes in full the details of the operation he has practised with striking success; and he appends short accounts of several illustrative cases. The lectures are well worthy of the attentive study of all physicians and surgeons; and we believe that the line of practice advocated in them is destined to meet with wide acceptance and be followed by great benefit to a class of sufferers to whom hitherto neither medicine nor surgery has been able to offer much aid. Part of the proof of the first lecture evidently escaped revision, for on page 4 we twice read "diathesis" for "diatheses"; and on page 7 "mucous" for "mucus," and "asceptic" for "aseptic"; on page 8, too, "prolification" must be a misprint for "proliferation."

OUR LIBRARY TABLE.

Endemic Goitre or Thyreocele. By WM. ROBINSON, M.D. and M.S. London: J. and A. Churchill. 1885.—This *brochure* contains the facts and arguments adduced by its author in his thesis for the degree of Doctor of Medicine of the University of Durham, together with subsequently added footnotes, and an appendix giving an account of three cases of cretinism. The thesis was awarded the gold medal of the year 1884. The small work is chiefly a well-arranged and practically exhaustive collection of the facts connected with goitre. One of the most interesting portions of the work is that which treats of the etiology of goitre. St. Lager's observations are quoted, showing that where the sulphide of iron exists in a form readily convertible into sulphate of iron there the endemicity of goitre is most marked. On this point our readers may refer to Dr. Thursfield's paper published in another column. Dr. Robinson gives reasons for believing that there is no diminution of goitre in Stanhope, which lies on the north bank of the river Wear. He states that there is certainly no excess of lime in the drinking water of Stanhope, for he obtained no reaction on the addition of oxalate of ammonium.

On some Common Injuries to Limbs; their Treatment and After-treatment, including Bone-setting (so-called). By EDWARD COTTERELL, M.R.C.S., L.R.C.P., late House-Surgeon, University College Hospital, &c. London: H. K. Lewis. 1885.—This is a readable and useful little book. Mr. Cotterell writes sensibly upon "bone-setting," stating plainly its value and its dangers. Practical hints in the treatment of common injuries of the limbs are given, and special stress is laid upon the importance of the surgeon himself ascertaining that the function of injured limbs is completely restored. Too often splints are removed, and no pains taken to restore perfect mobility of stiffened joints; this is wrong. Mr. Cotterell says so plainly, and gives good rules of treatment for such stiffness. The book will repay perusal, although not actually novel in its teaching.

The Quarterly Journal of Microscopical Science. No. XCVIII. April, 1885. Edited by Professors RAY LANKESTER, THISELTON DYER, E. KLEIN, MOSELEY, and SEDGWICK. London: J. and A. Churchill.—This number contains the following articles:—1. The Urinary Organs of the Amphipoda, by W. Baldwin Spencer; with one plate. 2. The Skin and Nervous System of Priapulus and Halicryptus, by Robert Scharff; with one plate. 3. The Eye and Optic Tract of Insects, by Sidney J. Hickson; with three plates. 4. A Peculiar Sense Organ in Scutigera Coleoptrata, one of the Myriapoda, by F. G. Heathcote; with one plate. 5. The Structure and Development of Loxosoma, by Sidney F. Harmer; with three plates. 6. A New Hypothesis as to the Relationship of the Lunghook of Scorpio to the Gillhook of Limulus, by E. Ray Lankester. The editors state that so many papers of value have accumulated in their hands, that they intend to issue a supplementary number in the course of the present month. It must, however, be specially ordered by subscribers. Amongst other articles they promise one by Oudemans, on the Circulatory and Nephridial Apparatus of the Nemertea; another by W. Bateson, on the Development of Balanoglossus; a third by Baldwin Spencer, on the Early Development of Rana Temporaria; and one by Herbert Carpenter, on the Vascular System of the Urchins.

Lehrbuch der Physiologie. Herausgegeben von Dr. A. GRUENHAGEN. Siebente Auflage, 5te Lieferung. Leipzig: Leopold Voss. 1885.—The present part of this work, which is a new and revised edition of Funke's well-known treatise, completes the first volume and commences the second. It is chiefly occupied with the subjects of the excitability of the nerves, the capacity of the nerves to transmit impressions in opposite directions, the rapidity of nervous conduction, and the nature of nervous stimulation. The work is remarkable for a clear and continuous exposition of the science of physiology, and for the excellent bibliography which is appended to each section.

Dwelling-houses: their Sanitary Construction and Arrangements. By W. H. CORFIELD. Second Edition, with Illustrations, pp. 117. London: Lewis. 1885.—This is one of the best handbooks we have met with on the subject of house sanitation. It states clearly and intelligibly the requisite conditions of a healthy home, indicates the most usual defects, and points out the most appropriate remedies. It is a work deserving the study of all householders who care for their own health and for that of their families.

Shepherd's First Aid to the Injured. Revised and rearranged by R. BRUCE. Pp. 78. London: St. John Ambulance Association. 1885.—This work, by Surgeon-Major Shepherd, who was killed in the unfortunate massacre at Isandhlwana, was one of the first handbooks brought out for the use of the ambulance classes. It still remains, in our opinion, the best manual for the use of non-professional persons to enable them to render aid in cases of accident or sudden illness until professional assistance can be obtained.

Help at Hand: or, What shall we do in Accidents or Illness? By COUNTESS COWPER. Pp. 38. London: Wells, Gardner, Darton, and Co. 1885.—The object of this work is to furnish a cheap guide to "first aid," for the use of Lady Cowper's "own parish." It is to a great extent compiled from Surgeon-Major Shepherd's manual; but the chapter on Anatomy and Physiology has been omitted, probably as being unsuited to the class for whom the book is intended, and one has been added on the treatment of some of the more generally prevalent diseases. We cannot say that we approve of the addition, as we fear it will often have the effect of delaying application for professional advice in cases of serious disease.

Illustrations of Clinical Surgery. By JONATHAN HUTCHINSON, F.R.S. Fasciculus XVII. London: J. and A. Churchill.—The four plates in this fasciculus illustrate Extra-capsular Fractures of the Neck of the Femur, Lupus of Mucous Membranes, Superficial Forms of Rodent Cancer, and Chancres in Unusual Positions. Both the plates and the descriptive letterpress maintain a high order of merit; and those who take in this serial work possess a very valuable book on clinical surgery.

The Tricycle in relation to Health and Recreation. By B. W. RICHARDSON, M.D. London: W. Isbister. 1885.—The papers collected in this volume, except a few additional notes, were published in *Good Words* a year or two ago. The main questions which the author endeavours to solve are: (1) whether the tricycle can be safely used by all classes of the community, or whether it is only fitted for a select few; (2) whether the working of the tricycle is healthful as an exercise; (3) whether there are any special dangers from its employment which, apart from mere accidents from falls and collisions, militate against its general use; and (4) whether there are any practical rules which can be offered for the guidance of those of different sex and different age who are anxious to become riders. These points are all fully discussed by Dr. Richardson, and to all intending to commence the use of the tricycle we can recommend a perusal of this little book.

New Inventions.

NEW MICROSCOPES.

M. THEILER & SONS, of 86, Canonbury-road, London, N., have brought under our notice specimens of their "Demonstration Microscope" and the "Universal (Achromatic) Pocket Microscope." Both are of novel design, and remarkable for the simplicity of their construction, the excellence of their manufacture, and the facility with which they may be manipulated. Intended for the observation of translucent or semi-transparent objects only, mirrors and condensers are in the use of these instruments dispensed with. The method of adjusting and fixing the focus is simple and ingenious. We anticipate that a wider knowledge of the convenient arrangement and the low price of these microscopes is all that is necessary to create for them a large demand.

SANITARY SEAMLESS STEEL SAUCEPANS.

THE increasing interest taken in the art of cookery, and the wider recognition of its importance from a public health point of view, have naturally stimulated invention in the direction of devising utensils more in harmony with the advancing intelligence in respect of the elements included in the question of the proper preparation of food. Messrs. Perkins and Son, of Bermondsey-street, have contributed to the perfecting of the process by introducing seamless steel saucepans and stewpans, for which they were awarded a silver medal at the recent Health Exhibition, and which were used at the School of Cookery in connexion therewith. These accessories to the *cuisine* are certainly quite worthy of the approval bestowed on them, and are a great improvement upon the cast-iron and copper culinary vessels hitherto employed. The ease with which cleanliness may be ensured in their use, to say nothing of their superior durability and sightliness as compared with the ordinary ware, ought to secure for these utensils extensive patronage.

THE PARLIAMENTARY REPRESENTATION OF THE UNIVERSITIES OF EDINBURGH AND ST. ANDREWS.

To the Editor of THE LANCET.

SIR,—The Conservative Committee have, with the haste characteristic of sharp electioneering tactics, sent round a circular in which, putting forward as a plea the abrupt retirement of Sir Lyon Playfair, they quietly assume that Mr. Macdonald is to be allowed without opposition to take his seat as representing these universities. With a constituency consisting of so large a predominance of scientific men, it is to be hoped that some man of scientific eminence may be found to contest the election with the legal profession. I trust that my fellow-graduates will not hastily be induced to throw up their interest in Liberal politics, led astray by the plausible statements of the Conservative Committee, who would fain persuade us that no alternative can be found to the return of Mr. Macdonald.

I am, Sir, yours obediently,
M.D. ST. AND.

June 8th, 1885.

AT a meeting of the Metropolitan Asylums Board on the 6th inst., it was stated that the returns of small-pox for the fortnight ending the 5th inst. showed a decrease of 97 in the total number under treatment in the hospitals of the managers. The number under treatment on the 5th inst. was 1247.

THE LANCET.

LONDON: SATURDAY, JUNE 13, 1885.

WE are again confronted with the great question of Hospital Sunday. The institution is no longer a local one, confined merely to Birmingham or London, but it exists in almost every town that boasts of a hospital, and promises to be as general and as successful in the United States as it is here. In every aspect of it Hospital Sunday is a thing to be encouraged and supported. The most creedless man must believe in the existence of an untold amount of physical suffering in a community like that of the metropolis, for which the pent-up homes of outcast London afford no accommodation. It is not for us to open too widely the windows of London hospitals and to expose the mass of disease with which the medical profession is contending, for the most part without fee or reward. And not the medical profession alone, but the dozen or score of gentlemen who, almost more benevolently, undertake the administration of hospitals in days when criticism is sometimes more active than charity. It has always been our regret that the ministers of religion in London do not see the hospitals on the Saturday preceding the Sunday on which they are to preach those sermons which in the last twelve years have produced the large sum of £358,256 11*s*. 1*d*. for London medical charities. There is something exceedingly eloquent in a well-ordered hospital: the sweetness of the air, the tenderness of the medical and nursing service, the adaptation of apparatus and of diet, and the obvious comfort of the majority of the cases, would supply data that should strengthen the argument of the best preacher, and perhaps double the contributions of the congregation. While the accommodation for the living and the strong in London is so unsatisfactory, it is pleasant to know that in a London hospital there is accommodation and skill for the sick which the richest might envy. The poor patient with fever, with consumption, with incipient cancer, with an imperilled eye, with an exhausting suppuration, with joint disease, or with the misery of tumour or of calculus, cannot wait. Every day makes his case worse and his prospect darker. And yet every day such cases are kept out of London hospitals from want of funds, or from want of room. In two even of the great endowed hospitals whole wards that were meant for the poor have had to be appropriated to those who can pay. We have entered our protest against such an alienation of London hospitals; but it still exists. It has a certain fascination for embarrassed treasurers, and will certainly be extended if care is not taken. The treasurers cannot reasonably be charged with the whole blame. They say that they would willingly keep the wards for the poor if the funds were forthcoming. But they are not. Rents of hospital properties have to be reduced. Subscriptions have fallen off. And to ask the treasurers to keep wards open without giving them money is like requiring the Israelites to make bricks without giving them straw. There is a certain amount of truth in these statements. What is the remedy? The remedy is in more generous subscriptions, and a larger Hospital Sunday collection. There is no other remedy. It is astonishing to notice the large number of persons who contribute nothing to charities. Mr. BURDETT has found that in a town with twenty-five charities and 350,000 inhabitants, only 6000 persons of the whole number contributed. He was very careful to count all contributions, great and small, and yet he had to conclude that only one in fifty-eight contributed to support charities; and he considers that this town represents most other communities. The Hospital Sunday Fund has put it within the easy power of all to make their contribution to this cause. It is not meant to supersede personal subscription and interest on the part of the wealthier classes. But it is meant to appeal to all to help to make a comfortable bed for the sick, the wounded, the maimed, and the blind, that they may be healed; or if this may not be, that their misery may be abated. The average annual amount of the metropolitan collection for the last twelve years has been £29,854. This is a great sum in itself; but when considered in connexion with the suffering which it is meant to meet, or with the means of those to whom appeal is to be made on Sunday next, it must be pronounced to be inadequate. No excuse will avail for this supreme neglect. "I was sick, and ye did not minister to me." It is of no avail to say that treasurers sometimes do not spend the money wisely, or that now and again a person who can pay occupies the bed that misery should claim for its own. This is only to say that the administration of hospitals is in human hands. Let all abuse be weeded out. The Council of the Hospital Sunday Fund has done great good in this direction, and has on this ground a strong claim to the confidence of those who wish wisely to help medical charities, whether in the way of a contribution on Hospital Sunday, or of a legacy that will permanently help the sick poor of this huge and complex community. We give in another column a list of hospitals which are at the present time suffering from the crippling effects of lack of funds.

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How are the prospects of medical legislation likely to be affected by the political crisis which has occurred? At the moment of going to press we do not certainly know whether there will be an immediate transfer of authority to the opposite party, or if the still existing Government will retain office until the natural expiration of a moribund Parliament. Whatever the eventuality, it seems only too certain that the prospects of legislation for the reorganisation of the profession and the advantage of the community in matters medical must be irretrievably damaged so far as the present session is concerned. Looking back on the last five years, it is only an act of justice to record the fact that seldom, if ever, within an equal period has the medical profession received so many honours from the hands of a Prime Minister as Mr. GLADSTONE has distributed, and we are glad to acknowledge that for this measure of favour we are directly indebted to the enlightened and generous appreciation of services and usefulness shown by the gifted statesman who is now, it is to be feared, finally resigning the control of public affairs. It is not for us to speak of general politics. Science has no knowledge of party, and can only concern itself with the public good; but it will not be thought out of place by any of our readers that we should express the strong persuasion that the respect, and if we may say so, the esteem of the medical profession will follow Mr. GLADSTONE into the retirement he seeks. If some of the subordinate members of his adminstration have been less appreciative, and shown less wisdom, that is a disappointment which, however keenly felt, cannot detract from the estimation in which the medical men of of this country—as a profession—must needs hold the outgoing political chief.

There are some commotions out of which good may come to all who are affected. This cannot be our case as medical reformers. For the present certainly, and the near future we fear, medical reform will have to wait. There is no reasonable prospect that the measures which it was hoped the session might see matured will find a place in the programme of a reconstructed Cabinet or of the incoming Government. We wish we could feel hopeful as to the chance of medical reform engaging the attention of the new Parliament. There is only too much reason to anticipate that, however advantageous the extension of the franchise and the consequent reconstruction of the Lower House may prove, for some at least, the spirit of vestryism will dominate the counsels of the nation, and domestic legislation will take the form of *political* sweeping and garnishing, rather than of a broad and intelligent ministering of justice to the great public needs.

If the Conservatives should hold office, we are bound to confess that—all party views and sympathies apart—it would be absurd to expect that medical men and their opinions will count *for* much. The healing art has little interest for the *aristocratic* party in politics. To be a "doctor" is to be beneath regard, unworthy of honour; and to speak of the interests of health, except in a meaningless phrase, is to introduce a topic too vulgar for delicate ears. Medicine, whether as a science or as a profession, has little to hope from the party which never once in six years conferred an honour on any member of the medical body; and, though it talked much, did nothing—or, if possible, less than nothing—for the advancement of science and the encouragement of those whose lives are spent in a ceaseless struggle to reduce to practice the fruitless aphorism, *Sanitas sanitatum, omnia sanitas.*

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THE extension of the franchise in its political bearings is a subject beyond our care. Both parties in the State have sanctioned it and actually co-operated in arranging it, so we may presume there is some deep justice, some deep necessity in the measure. Our concern is with the moral and social consequences of it. Millions of our humble fellow countrymen are to be endowed with grave political functions. It is not denied that many of these millions are ignorant and unintelligent, but it is supposed that by some divine instinct in the people they will be led to great and true conclusions. We hope it may be so. We are not disposed to think quite so meanly of the people as even MILTON did.

> "And what the people but a herd confused,
> A miscellaneous rabble, who extol
> Things vulgar, and, well weigh'd, scarce worth the praise?
> They praise and they admire they know not what
> And know not whom, but as one leads the other."

What we may fairly ask for in the new voters is an increase in the sense of independence, of that creditable pride which makes men almost starve rather than ask alms or parish relief. The question of disfranchisement for medical relief, which, like so many other questions, serves for Parliamentary strife and debate, should settle itself in the conscience of honest men, who should disdain to ask a voice in the settlement of national affairs till they have shown themselves capable of managing their own. How can a man receiving parish relief have either the conscience or the intelligence to vote? We demur to the doctrine that to be on the parish for medicine is different from being on the parish for a loaf of bread. We can recognise no such distinction, and we think it high time that it was exploded. Medicine is a rarer and a lesser want than food, and there is by so much the more discredit in an improvidence which does not recognise its humble claims. Medical men have been too long the scapegoats of the improvidence of the poor on the one hand, and of the scanty charity of the rich on the other. And the Franchise Bill will have a much-needed vindication if it intensifies the sense of personal responsibility in the humblest man, and makes him feel it a mean thing to go on the parish for a bottle of medicine or even for a serious illness. The humanity of the medical profession needs no vindication. It has had ample recognition from all judges and all classes. It makes the most generous provision for the poorest, and it is now for the poorest to break with all pauperising associations and to maintain their own independence and political power by entering provident clubs, in which a medical officer is fairly well paid, and in which the patient, when sick, can find not only an efficient medical man, but temporary allowances of money. No greater mistake could be made than to introduce the Irish dispensary system into England, it being greatly abused even in Ireland; and there is a great risk of doing this if we make fine distinctions between medical and other forms of relief. If the working classes are to derive benefit from the franchise, it will be by raising in them the sense of their importance and of the meanness of dependence on rates, either for medicine or anything else. Very little self-sacrifice will suffice to prevent the disfranchisement of voters on the score of medical relief, and the man who will not make it is presumably—there will no doubt be honourable exceptions—unworthy of the franchise.

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HEADACHE, although so common an affection, possesses a peculiar interest on account of the tantalising obscurity in which its cause is often shadowed. Depending upon one or two main physiological principles connected with the passage of nervous impulses and the calibre of cerebral bloodvessels, it yet arises in response to so many different stimuli, that, practically, the branches of its original stem of structure, its distributive variations, are perplexingly numerous. Among the forms but recently described and named, though probably as old as Art, is the "academy headache." Critics and doctors have vied with one another in trying to translate this term according to the rules of medical logic, but have not, so far, been able to agree as to its meaning. In venturing to put forward our own opinion on the subject, we think it best to notice the different circumstances which tend to produce in the frequenter of galleries that general sense of fatigue which is often the precursor of pain, and then to note the special stimulus which brings out of this chaos the formed and local ache. It should be noted that all do not suffer from this form of headache; while of those who do, some are less and some more affected. Fatigue may be the limit of annoyance with a certain class. They are heavy-limbed and heavy-headed, languid, but no more. The forces at work upon them are the warmth of the crowded room, the summer sunshine pouring through the skylights, the listless rotation or circulation, rather than walking, through the rooms, and the weariness of much-divided attention. Being robust and used to go about upon their feet, they soon lose the feeling of languor after its causes cease to act; and if their eyesight be equally healthy, they suffer no strain in these organs. There are other persons, of weaker organisation or more sedentary habits, in whom pain quickly follows fatigue, and it is felt, for certain reasons, chiefly in the head. Among these reasons we must note the fact that in the standing position the blood, driven by a languid heart, reaches the head with greater difficulty than when recumbent. Anæmia is one cause of headache. Anæmia, too, is associated with changes of arterial calibre which constitute the usual cause of megrim. Under these conditions, also, the giddy malaise of a loitering gait is painfully perceptible. Concentrated attention increases the uneasy sensation. The frequently constrained position of the head has its influence. It would be strange, moreover, if ocular movements had no share in the production of this complex indisposition. Let anyone converge his eyeballs to an acute angle, as in squinting, or let him direct a sidelong glance of extreme obliquity, and a single effort will convince him of the pain of such muscular effort. No doubt this is the pain of muscular tension, acute and so far abnormal; but it is also possible to induce a similar pain from the strain of too frequent muscular action within the normal limits of accommodation to distance or other movements of the eye. Ocular pains of this kind are felt as an aching about the middle and back of the head. The scrutiny of paintings or engravings, from the many points of interest which have to be noted, requires a considerably greater exercise of the muscles of the eyeball than is called for in ordinary life. In this fact, established, as we have already stated, on a basis of fatigue and general muscular and nervous strain, we have probably the usual exciting cause of the form of headache we have been discussing.

Annotations.

"Ne quid nimis."

THE COLLEGE ELECTION.

FOR the three vacancies in the Council of the Royal College of Surgeons of England there will be seven candidates—namely, Mr. Savory, who seeks re-election, and, in their order as Fellows, Messrs. Gant, F. Mason, Rouse, Cowell, Macnamara, and O. Pemberton. It will be remembered that the other retiring members, Messrs. Erichsen and Holmes, do not desire re-election. This is a regrettable circumstance, as both these gentlemen are avowed supporters of a policy of reform. Their withdrawal from the Council at this time may therefore seriously cripple the action of the party favourable to progress. At all events, it suggests a more careful selection of candidates and a closer scrutiny of their views. It would save some misunderstanding and possible recrimination if all candidates were to set forth briefly and succinctly their political doctrines. For the last two or three years several candidates have owed their election to a general belief that they would support certain projected attempts to place the Council *en rapport* with the Fellows and Members. No sooner were they elected than they gave their votes in favour of maintaining the *status quo antea*. While it would be unjust to impugn the probity of these members of the Council, it is impossible to acquit them of culpable political incapacity, indifference, or ignorance. Such a contingency should not be possible. If a candidate is not prepared to make a declaration of his political faith and belief, he ought at least to have the courage not tacitly to accept imputations which, though favourable to his election, are contrary to his convictions.

MEDICAL DEGREES AT OXFORD.

ON Tuesday last, the 9th inst., the preambles of two statutes of great importance to candidates for the medical degrees of this University were approved. By the first, a Faculty of Medicine distinct from that of natural science was constituted, and the professors of anatomy, botany, chemistry, experimental philosophy, medicine, natural philosophy, and physiology were assigned *ex officio* to the Board of the Faculty. By the second, the examinations for the degrees will be materially changed, and the alterations are very freely criticised. Exception is especially taken to the proposition that any candidate may be exempted from the whole or any part of the examinations in medicine, surgery, or midwifery, if he has passed a qualifying examination in these subjects approved by the Board. It is evidently intended by this clause that candidates for the final M.B. examination should have previously passed the Conjoint Board of the Colleges of Physicians and Surgeons, and to this the Oxford medical graduates are unanimously opposed. They urge very forcibly that Oxford has nothing to do with the corporate examinations, which are only put forward as a necessary minimum of medical knowledge, and that it will make a false step if it allows the principle that the University can accept an examination carried on independently of itself as the equivalent of its own. The subjects proposed for the three examinations for the M.B. degree are—for the first, elementary anatomy and physiology, organic chemistry, materia medica and pharmacy; for the second, human anatomy and physiology; for the third, medicine, surgery, midwifery, pathology, pharmacology, and climatology.

THE ETIOLOGY OF ERYSIPELAS.

THE now fairly well determined fact that erysipelas is a disease due to the invasion of micrococci has not hitherto led to a sufficient explanation of the varieties of the disease, and particularly of the points of difference and of resemblance between traumatic and idiopathic (so-called) erysipelas. In an interesting study of the subject in Virchow's *Archiv* (Bd. 100, Hft. 2), Dr. Rheimer, pathological assistant at Zurich, after reviewing the evidence as yet adduced concerning the nature of erysipelas, details the results of his examination of two cases of typhoid fever in which this complication occurred. The cases arose in a very severe epidemic which took place in Zurich in the spring of 1884, and he contrasts the microscopical characters of the affected skin, and other tissues obtained from them, with those observed in traumatic erysipelas. In the latter he describes not only masses of minute cocci in the lymphatic spaces and vessels, but also very definite chains of larger cocci and diplococci, apparently the same as those originally described by Recklinghausen, and since by Lukomsky, Koch, Ziegler, and many others. In the typhoid erysipelas these last-named micro-organisms were conspicuous by their absence; for although the minuter forms were present in much the same situations and character as in traumatic cases, there were, instead of large micrococci, a number of mostly straight rod-shaped organisms scattered throughout the tissue. These organisms stained badly with reagents, and were apparently identical with the bacilli which Klebs, Eberth, and Gaffky have found more or less constantly in typhoid fever. Although the fact of the existence of a "*bacillus typhosus*" is still *sub judice*, and has indeed been contested by many, it receives a certain amount of confirmation from this discovery. The latter has, however, a bearing upon the etiology of erysipelas, as indicating that the cutaneous lesion—i.e., the dermatitis—may indeed be excited by more than one kind of poison, or, perhaps, to speak more correctly, by more than one kind of microparasite. It may be that there is a specific erysipelas organism for the traumatic affection; but it is possible that the spontaneous cases, and especially those which arise as complications of other infective diseases, own a different etiology. The question is a suggestive one, and offers a fertile field for further research.

FAITH-HEALING A FACT.

THERE can be no question that faith-healing is a fact. The brain is not simply the organ of the mind, it is also the chief centre, or series of centres, of the nervous system by which the whole body is energised, and its component parts with their several functions are governed and regulated. There is no miracle in healing by faith; whereas it would be a miracle if the organism, being constituted as it is, and the laws of life such as they are, faith-healing did not under favourable conditions occur. The fallacy of those who proclaim faith-healing as a religious function lies in the fact that they misunderstand and misinterpret their own formula. It is the *faith* that heals, not the hypothecated source, or object, of faith outside the subject of faith. The whole process is self-contained. Nothing is done for the believer; his act of believing is the motor force of his cure. We all remember the old trick of making a man ill by persistently telling him he is ill until he believes it. The contrary of this is making a man well by inducing him to believe himself to be so. The number of the "miracles" performed will be the precise number of the persons who are capable of being thrown into a state of mind and body in which "faith" dominates the organic state. Pathologists will limit the area of this process to the province of functional disease; but we are not sure that they are justified by scientific facts in making this limitation. It must not be forgotten that function goes before organism in development, and that there are large classes of cases in which the disabilities of a diseased organ for a fair performance of its functions are mainly due to want of power or irregularity in action. And it is a fact in pathology, that if the function of an organ be maintained or restored much of the destructive metamorphosis due to proliferation of connective tissue, fatty deposit, or even certain forms of atrophic change in which the nuclei of cell-life are rather denuded than destroyed, may be arrested and to some extent repaired. The *vis medicatrix naturæ* is a very potent factor in the amelioration of disease, if only it be allowed fair play. An exercise of "faith" as a rule suspends the operation of adverse influences, and appeals strongly through the consciousness to the inner and underlying faculty of vital force. There are many intractable cases in every practice which might be "cured by faith." It is well that these poor persons should be benefited by some means, it matters little what; and if they can be "healed by faith" we ought to be very glad, and thankful too, for the mistaken zeal of those who, being weak-minded themselves, make dupes of other weak-minded folk to their advantage. This is a blind leading of the blind in which they do not fall into the ditch, but, by a happy combination of circumstances, actually escape danger and gain something to boot.

INCONCLUSIVE EVIDENCE OF THE CAUSE OF DEATH.

AN inquest was held at Horninglow, on June the 3rd, before Mr. A. Flint, coroner for the district, touching the death of Mrs. Millar, aged twenty-seven, wife of the vicar of the parish. It appears that the deceased, who was in her usual health on Sunday evening, May 31st, retired to her bedroom at half past ten o'clock, seeming then a little unwell, and at eleven—half an hour afterwards—she was discovered dead on her bed. There was nothing in the surrounding circumstances to explain or suggest the cause of death beyond lividity of the face and blueness of the lips noticed by the husband of the deceased. Dr. W. G. Lowe, who saw the body some two hours later, deposed that there was "a little livid discolouration of the nose, and her lips looked a little blue, but not markedly so; the rest of the face was pale." At the autopsy no organic disease was discovered. A small piece of orange pulp was found in the mouth, but it had clearly not caused death by impaction in the glottis. We cannot agree with Dr. Lowe when he says: "There would have been more indications" if poison had been taken, for it is well known that certain narcotics and convulsants leave no characteristic sign of their action. We have no reason to believe that death arose from other than natural causes, as found by the jury; at the same time we hold that the evidence was sufficiently equivocal to warrant further inquiry. No mention is made in the report of the inquest whether the urine was examined or not. Was there albuminuric eclampsia? Was there diabetic coma? Was the deceased subject to epilepsy in its minor manifestations? Was there a neurotic family history? These are questions that suggest themselves for investigation. Diabetic coma rarely ends so quickly as to be a probable explanation of this case, but we want further experience of the variations to which this peculiar and interesting state is liable. Mrs. Millar may have died from natural causes—apparently she did; but notwithstanding, it is matter of regret that the proximate cause of death was not brought within narrower limits.

A POISONOUS CARPET.

ANOTHER and aggravated example of poisoning, apparently by arsenic, is said to have occurred in New York. A green carpet, which was cut and sewn by the lady who purchased it, acted in this case as the *medium of conveyance*. The symptoms present are not detailed. They were, however, severe, and unexplained by any circumstance until traced to the carpet referred to, and this article was found on analysis to be loaded with pigment of the *most dangerous* kind. Such cases are, unfortunately, too old in memory, and too unmistakable, to afford in themselves much material for comment. One important fact is recorded in the instance before us, and is well worthy of general imitation. The local sanitary authorities have taken the matter in hand, with the intention of prosecuting the manufacturer of the carpet, and will thus do what they can to prevent the occurrence of such culpable mishaps in future. This is the most effective method of dealing with such cases of domestic poisoning. Unless the source of the evil is stopped, there is obviously little hope of a permanent cure. The mere treatment of its effects will not suffice. The purchaser of dyed material on his part cannot be expected to distinguish at sight a noxious arsenical or other dye from a harmless one of exactly similar hue. He usually and almost inevitably derives his proof of quality from painful experience. The subject therefore is clearly one which calls for penal regulation at an earlier stage, and the example set by the Sanitary Board of New York will not, we hope, be lost upon our own Legislature and Executive body.

AN INFECTIOUS DISEASE HOSPITAL FOR NOTTINGHAM.

The Corporation of Nottingham have just decided to purchase 126 acres of land situated, not, as stated last week, on the site of the dwellings to be demolished, but outside the town and some two miles distant from the market-place, for the purpose of erecting thereon a new hospital for infectious disease. They have certainly acted wisely in the step they have taken; the situation of the existing hospital is open to much criticism, and, as we have before pointed out, has had in its immediate neighbourhood, when used for the reception of small-pox patients, a suspicious number of cases of this disease. By going to the intended site they will escape this risk, and will doubtless be able to save themselves in the future the expenses of litigation, which have made small-pox hospitals so costly to London ratepayers. But to avoid litigation is not, however, the whole object to be considered. Nottingham will judge the matter from a higher point of view than is possible for London under existing government. In Nottingham the hospital is to be used for the prevention of infectious disease; in London the primary object of similar institutions is for the treatment of persons suffering from this class of malady. The difference between the two purposes is worthy of observation.

THE TREATMENT OF CHOLERA.

The current number of the *Practitioner* contains the concluding paper of the interesting series that have been published in that journal by Drs. Lauder Brunton and Pye-Smith, in the course of which they have discussed the present knowledge of the pathology of cholera. Speaking of the treatment of the disease, they divide remedies into five classes: of these, three contain remedies which act on the intestine. They are—1. Those which are likely to have an antiseptic action on the intestine by destroying any organisms there present, such as carbolic acid and its allies, sulphurous acid, nitro-muriatic acid, hyposulphites, permanganates, chlorine, chloralum, turpentine, salts of copper, boracic acid, calomel, and corrosive sublimate. The cholagogue action of calomel is thought to be of service by inducing indirectly the antiseptic action of bile. 2. Those remedies which will tend to remove the cholera poison, whether it consists of living organisms or of some chemical substance, exemplified by the treatment by castor oil and other purgatives. 3. Those remedies which will counteract the effect of the poison upon the intestinal canal, as opium, morphia, ice water, belladonna, cannabis indica, chloroform, chloral, carminatives, and astringents. 4. Remedies which will tend to eliminate the poison from the system, as copious draughts of water (as diuretic) and purgatives. 5. Those remedies which will counteract the effects of the poison—viz., intravenous injection of saline fluids and other substances, and various measures to restore the circulation by acting upon the skin. In dealing with the premonitory diarrhœa, Cantani's method of injections, by means of the long intestinal tube, of laudanum and tannic acid is described. The authors consider that Ferrán's results of inoculation are more favourable than could have been expected, and point out the following as "directions in which further researches after a remedy for cholera are most likely to prove successful":—"1. The discovery of an antiseptic which will destroy pathogenic organisms in the intestine and prevent the formation of the cholera poison, while they are not themselves poisonous. Corrosive sublimate is a sufficiently powerful antiseptic, but it may itself prove poisonous to the patient as well as to the pathogenic organisms. It is possible that amongst the members of the aromatic group of bodies substance may be found having the desired properties. 2. The discovery of some substance which will antagonise the action of the cholera poison after its absorption. As a preliminary step in this direction further experiments are needed in the nature and action of alkaloidal substances obtained from cholera dejecta, as well as from artificial cultivations in various media and under various conditions, electrical and otherwise. 3. Observations on the effect of stimulation of the mesenteric plexus by currents passed through the uninjured abdomen in poisoned animals and in patients suffering from the disease."

THE DARWIN MEMORIAL STATUE.

On Wednesday last the Prince of Wales accepted, on behalf of the Trustees of the British Museum and for the nation, a statue of Darwin. There was a large gathering of scientific men, and the statue, which is the work of Mr. Boehm, has been placed in the Great Hall of the New Natural History Museum at South Kensington. Mr. Huxley, who was chairman of the committee and is the President of the Royal Society, made a characteristic speech, in which he pointed out that the publication of the "Origin of Species" practically effected a revolution in science, whilst its effects were even now being felt in many other departments of human knowledge. Vehemently opposed in the first instance, the foundations of that work were laid so deeply, and its conclusions were so well supported by facts, and afforded such satisfactory solutions of problems long regarded as insoluble, that, even within the author's lifetime, he had the satisfaction of feeling that his views were accepted by naturalists in every country, and the majority were engaged in applying them in their every-day work, rather than in attempting to dispute their value and accuracy. The subscriptions for the statue have been sent in from almost every civilised country, and the interesting statement was made that from Sweden alone 2296 subscriptions were received, the donors differing in station from the bishop to the seamstress, and the sums from £5 to 2*d*. The statue has been erected from a small part only of these subscriptions; the major part is to be applied to what the modest philosopher would have most desired—the promotion of biological research.

POISONING BY PENNY ICES.

In the year 1878[1] we drew the attention of the profession to the manufacture of penny ices, showing their composition and the quality of their ingredients. In the following year, 1879,[2] a Lancet Sanitary Commission reported on the condition of the Italian quarter, and described the mode of life and surroundings of the London penny ice man when at home. We fear that as great a necessity for supervision by the local sanitary authorities exists now as when the inquiries were made, and that chemical examination of samples of the ices should be made from time to time as then recommended. During Sunday, June 7th, and Monday, June 8th, more than twenty people suffered from symptoms of irritant poisoning, which came on about two hours after partaking of penny ices bought from one of the Italian street barrows. Thirteen of these were treated by the house physician, Mr. R. M. Williams, at St. Thomas's Hospital, the symptoms being similar, but varying in severity. The most severe case was that of a woman aged forty-two, who was admitted. She arrived about four hours after eating one of the ices, suffering from severe colicky pains, diarrhœa, some vomiting, dryness of the fauces and tongue, and collapse. An emetic was given, which produced free vomiting; later she was given some carminatives, with ammonia, and was able to return home on the following day. Some of the cases treated at their own homes were quite as severe as this. It was difficult to say what was the cause of these symptoms. The day after these people were poisoned the contents of the ice-bowl were examined, but with negative results. Examination of the vomited matter, however, has proved the presence of sufficient carbolic acid to explain the symptoms, and it is probable that this found its way into the ices from carelessness on the part of the maker; carbolic acid being used in the earlier stages of manufacture of a preservative material which is employed by the men to prevent decomposition of the ingredients used in making the various ices. Either the chemical processes had not been carried out to their full extent, and the solution used contained much free acid, or the acid itself had been employed by mistake.

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[1] Vide The Lancet, vol. ii., p. 281.

[2] Ibid., vol. ii., p. 592.

LOZANO ON THE MORTALITY OF MADRID.

DR. G. G. LOZANO endeavours, in a series of essays just reproduced in pamphlet form, to account for the high rate of mortality existing at Madrid. He complains that medical students have but little instruction given them in the diseases of children, amongst whom the mortality is especially high. In his own case he says that he had but a single lesson, from an eminent professor it is true, in the diseases of childhood, and as, when he began practice, his first patients were children, he found himself in an unpleasant situation. There is plenty of clinical material for such instruction in Madrid if it were made proper use of. He complains also of the number of *curanderos*, or quacks, and tells a story about one who "put the bone in" in a case of abscess, which could probably be matched by many an English surgeon who happens to practise in the vicinity of a bone-setter. Small-pox claims a considerable number of victims. Señor Lozano, however, does not discuss the efficiency of the arrangements for vaccination, though he enters at some length on the subject of the importance of a new hospital for contagious diseases, with especial reference to variola. He passes over in a few words the subject of general hygiene, and we look in vain for any proposal for a satisfactory system of drainage, which must be sadly needed in Madrid. A good deal is made of the want of ventilation, and of the injurious crowding in theatres and cafés, and some mention is made of the vices of the inhabitants. The writer is very dissatisfied with the death-rates as published; that of Madrid is, in his opinion, too high, and that of London too low, his respect for the figures in the "Annual Summary" of Messrs. Eyre and Spottiswoode being very small.

EXCITABILITY OF THE CEREBRAL CORTEX.

AT recent meetings of the Académie des Sciences M. Vulpian has continued his demonstrations on some of the functions of the cerebral cortex. He points out that in the dog the effect of an equal stimulus is greater at the facial centre of the cortex than it is at the brachial or crural centres. Pflüger's theory, that a nervous impulse gathers force as it passes along a nerve (avalanche theory), is rejected. If the avalanche theory be true, then stimulation of the crural centre of the cortex ought to give rise to a more energetic contraction than stimulation of the facial centre. The opposite is notoriously the case. Vulpian believes that electrical excitations must be stronger in order to put into action the posterior limb than those used to provoke a facial movement, not because there is any real difference in the excitability of the grey matter of the two regions, but simply because of the distances which separate the centres from the muscles. In the same way, if the dog be anæsthetised by successive doses of chloral hydrate, a time arrives at which a certain stimulation of the cerebral cortex fails to excite a movement in the limbs, whilst the same stimulus may call forth a movement of the face. The reason, according to Vulpian, of this difference is simply that the impulse originated by the electric stimulation has a less distance to pass before it reaches the facial nucleus than it has to reach the nuclei governing the movements of the limbs. Vulpian argues in favour of a uniform excitability of the grey matter of the so-called motor centres.

THE LATE PROFESSOR COHNHEIM.

THE numerous contributions to pathological science which Professor Cohnheim made during the twenty years of his active scientific career have been collected into a volume ("Gesammelte Abhandlungen von Julius Cohnheim." Berlin: A. Hirschwald), under the editorship of Dr. E. Wagner. The papers and monographs, thirty-eight in number, are mostly reprinted from Virchow's *Archiv*, to which Cohnheim was a constant contributor. They are arranged in chronological order, opening with his essay on Inflammation of Serous Membranes (1861), and closing with his Studies on Renal Circulation, made in conjunction with Dr. Charles Roy (1883). Between these two how many familiar subjects are to be found in essays that have attained a world-wide renown! Here, for example, is the famous paper on Inflammation and Suppuration (1867), and the well-nigh as celebrated Researches on the Embolic Process (1872); followed by those studies upon circulatory disorders, œdema, dropsy, &c., which seem naturally to flow from the new ideas. Here, too, is his suggestive paper on Tumour Metastasis, and his celebrated address on Tuberculosis, which may be said to have anticipated the subsequent discoveries of Koch. Besides these there are many contributions to pathological anatomy. The volume, taken together with the well-known "Vorlesungen über Allgemeine Pathologie," forms a lasting memorial of the ardent student and teacher, who, in spite of continued ill health, contrived to contribute so largely to knowledge, and to inspire so many with a like zeal for research. The value of the book is enhanced by a memoir of the author from the pen of Professor W. Kühne, who knew him well, and who testifies to the severe loss sustained by his early death. A portrait of Cohnheim is prefixed to the volume. Many who knew him only by his work will doubtless be glad to possess a volume which those who did know him personally will cherish as embodying the history of his career, for his life compels admiration not only for the genius he possessed, but for his nobility of character and the steadfastness with which he pursued his duties under obstacles that would have crushed a man of less abundant energy.

TREATMENT OF RICKETS.

DR. SEMZCHENKO writes to a St. Petersburg journal that he was induced by the successful results obtained by Kassovitz in the treatment of rickets by phosphorus to make trial of it, notwithstanding the adverse statements of Henoch and Schwechten. He gave it to fifteen children from eleven weeks to twenty-two months old, all other medicine being intermitted during the trial of the phosphorus, which was prescribed in an emulsion with sugar and gum. It was only stopped when severe vomiting occurred. He came to the conclusion that it was an utterly useless mode of treating these cases, and reverted to his usual method of managing rickety children, which consists of giving salt baths daily, the head being washed with warm water and the whole body with brandy-and-water. Internally tannate of quinine (one to two grains) is administered with one-eighth of a grain of extract of secale in from two to four powders daily. They are fed with bouillon, boiled milk with from one to two tablespoonfuls of lime-water and from a quarter to half a teaspoonful of cognac to the tumbler. Children at the breast are given a teaspoonful of lime-water and glycerine from two to four times a day. When they have large abdomens, enemata (one to two tumblerfuls), containing from fifteen to forty grains of salicylate of soda, from ten to thirty grains of borax, or from two to three tablespoonfuls of a 1 per cent. solution of carbolic acid, are given. In from one to two months the little patients invariably show a marked improvement under this method of treatment.

THE LATE MEDICAL OFFICER OF HEALTH FOR LEICESTER.

WE hear with much regret that Dr. William Johnston has resigned the appointment of Medical Officer of Health to the Borough of Leicester, which he has held for seven years. Dr. Johnston's excellent work during this period, and especially his investigations into the etiology of infantile diarrhœa, are well known to the profession. It is therefore with the more surprise we learn from the *Leicester Advertiser* of May 30th that his retirement is due to the difficulties he has encountered at the hands of members of his authority, and has resulted from "the bullying and hectoring" he has been called upon to endure. The position of the medical officer of health is becoming increasingly difficult. He is expected to bring to the performance of his duties a greater technical knowledge, and is required to devote to them, for very inadequate remuneration, a considerable portion, if not the whole, of his time. He is also required by public opinion to protect the inhabitants of his district against disease, and to do so he must necessarily interfere with the vested interests of those who are but too readily allowed to assume the position of his employers. The duties of other officers of local authorities, clerks, surveyors, &c., do not cause them to excite the hostility of individuals whose interests are opposed to sanitary improvement, and their positions are therefore sufficiently secure. The medical officer of health is, however, differently circumstanced, and recent events have but too clearly shown the need for an improvement of his position. Unless the public mind is soon awakened to the importance of this matter, the public health service will deteriorate, and the public themselves suffer.

ŒDEMA OF THE GLOTTIS IN TABES DORSALIS.

ANY phenomenon may be met with in the course of tabes dorsalis; at least, this statement would seem to be a warrantable conclusion from known facts. We must not lose sight of the circumstance that accidental phenomena also exist and may occur in tabes dorsalis, as in any other disease, without any special significance. M. Huchard read at a recent meeting of the Société Médicale des Hôpitaux (*La France Médicale*, June 2nd) a paper on a case of Œdema of the Glottis following the administration of iodide of potassium in a patient the subject of tabes dorsalis. There was no history of syphilis or alcoholism, and no evidence of Bright's disease. The man was treated on account of the locomotor ataxy with four grammes of iodide of potassium per day. The treatment had to be suspended owing to the induction of iodism. After some days the medicament was given in smaller doses. This renewed treatment was followed by grave attacks of dyspnœa, which threatened suffocation. M. Gougenheim detected œdema of the arytenoid region by laryngoscopic examination. During one of the attacks the "interne" was obliged to perform tracheotomy. The patient ultimately did well. M. Huchard thought that the grave result was largely due to the influence of the iodide of potassium, whilst admitting that a sensory disturbance in tabes dorsalis may have played a part in the occurrence of the phenomenon. Chemical examination of the iodide of potassium showed that it was impure and contained a certain amount of iodates.

TREATMENT OF NEURALGIA BY NEUBER'S METHOD.

DR. SCHAPIRO recently read a paper, at the Medical Society of St. Petersburg, upon the results of researches on treatment of neuralgia by Neuber's method of hypodermic injections of a solution of osmic acid. His observations include eight cases of trigeminal neuralgia (three males and five females). The age of the patients varied from thirty-eight to sixty. In every case the disease was of a very severe type and of long standing. The result of the treatment was complete cure in five cases (three females and two males), great alleviation of the pain in two cases, and no success at all in one case (female). The number of injections made in each case was from one to twelve (twenty in one case), five to ten drops being injected every time. The duration of the treatment was from one to sixty days. Dr. Schapiro adopts a modification of Neuber's 1 per cent. aqueous osmic solution on account of the osmic acid soon undergoing decomposition in a watery solution. After a whole series of combinations, he concluded that an addition of glycerine to the watery solution prevents for a long time osmic acid from undergoing any change. In not one of the cases treated by him was an injection followed by any ill effect. The patients are now under the author's observation (two to six months after the commencement of the treatment).

VIVISECTION RETURN.

THE return issued by the Home Office containing the reports of the inspectors showing the number of experiments performed on living animals during the year 1884 appears to us to be highly satisfactory. It shows that a considerable amount of judgment and caution must have been exercised in the granting of licences, and this is indicated not so much by the paucity of persons holding licences as by the nature of the experiments and the purposes for which they were undertaken. We believe the Home Office takes a good deal of trouble in endeavouring to ascertain, not only from its inspectors, but from the most eminent men in science, whether the experiments proposed to be done by the applicant for a licence are such as are likely to be attended with useful or important results. Licences have been refused or the application allowed to fall through as the outcome of this advice from men fully competent to judge. Altogether 441 experiments were performed under forty-nine licences held in England and Scotland. Of these 218 were done under the full influence of anæsthetics, and the animal not being allowed to recover consciousness no pain would be felt. Of the remaining 223, 99 experiments simply consisted in inoculation with a morbid virus, and the pain caused at the time and the suffering experienced afterwards amounted to no more than ensues on ordinary vaccination; but of the 99 only 16 are reported as suffering afterwards, for the inoculation had no morbid effect in the majority. Twenty-four experiments were performed for the purposes of medico-legal inquiries in cases of suspected poisoning, resulting in death by tetanus of three frogs and six mice, which survived, however, only a few minutes. Ten other cases were experiments on the infection of fish with a species of fungus very destructive in certain rivers and streams; and five on the effects of immersion of fish in distilled water, which proved fatal to about thirty minnows and sticklebacks. In none of these cases could it be said that any appreciable suffering was inflicted. In seven cases in which the salts of ammonia were hypodermically injected, two are returned as having suffered pain, but of a very trifling character. Of the remaining 76 experiments, 47 required a simple operation, but this was always done under anæsthesia, and the after-effects, though in many cases resulting in partial paralysis, are reported as having been unattended with actual pain in any case. The report concludes by stating that the amount of direct or indirect actual suffering, as the result of physiological and therapeutical experiments performed in England and Scotland under the Act in the year 1884, was wholly insignificant. In Ireland the report states that only thirteen experiments were performed, and these were all of a painless character.

MEDICAL HONOURS.

OF the honours bestowed in connexion with Her Majesty's birthday a few have fallen to the share of members of the medical profession. Dr. Peter Eade, F.R.C.P.L., lately Mayor of Norwich, has received a knighthood; Dr. J. M. Cuningham, lately Sanitary Commissioner with the Government of India, has been appointed Companion of the Order of the Star of India; and Francis Day, Esq., Deputy Surgeon-General (retired), Medical Department, Madras, Companion of the Order of the Indian Empire.

SIR CHARLES ALEXANDER CAMERON.

THE profession as well as the public will learn with much pleasure that Dr. Cameron, the medical officer of health for Dublin, has received the honour of knighthood. It is stated that Dr. Cameron's services in the promotion of the public health have gained for him this distinction, and we warmly congratulate him upon being the first health officer who has had his services thus recognised. As a rule, honours of this character are bestowed upon medical men only for personal services to the Sovereign, the principal medical officers of the Army and Navy and very few others being exceptions. Sanitary service has, however, grown in public estimation, and we may hope to see in the future that the prevention of disease and saving of life effected through its means are thought to be not less deserving of recognition than other duties performed for the State.

CHOLERA IN EUROPE.

THE increase of cholera in the east of Spain and the invasion of fresh towns may be regarded as an indication that the year will not pass away without a repetition of some of the calamities which marked the appearance of the disease in France and Italy last summer. As yet there is no confirmation of the report that Marseilles is again the seat of the disease; but there can be no question of its prevalence in Madrid, and as the season progresses and the warm weather of June and July has had opportunity to exert its influence, we shall doubtless hear of the extension of cholera into more northern latitudes. Whether England may come within the area of its operations during the present year it is as yet too early to predict; but the fact that the second week of June has nearly ended without any sign of cholera in the direction which it usually follows before reaching this country is no criterion that we shall escape. The inoculations of Dr. Ferrán will doubtless excite more interest on the Continent than in England; our own defences against the disease are fortunately not only of a more trustworthy, but of a more permanent, character.

MIND AND MATTER RECONCILED.

MR. ROMANES, the Rede Lecturer at Cambridge this year, has hit upon an ingenious way of reconciling the antagonistic properties and interests of mind and matter. Finding himself in the midst of the cross fire between the spiritualists and the materialists in science, he proposes to put an end to the conflict by a synthetical process of reasoning, in which he seeks to show that the antithesis between mind and motion is phenomenal or apparent, not absolute or real. He does not think matter is the cause of mind or mind the cause of matter; in other words, motion does not always cause change or change always cause motion, but the two working side by side react and work out the chain of cause and effect together. This is a new development or application of the law of resultants, by which two forces acting in converging lines, or obliquely upon each other, give rise to a third or intermediate force, which is the result of their mutual reaction. We are therefore to believe that neither spiritualistic views of science are true nor materialistic views, but that truth is a mean of the two. We trust those who are harassed on the subject will find comfort in this new revelation of fact.

COCAINE IN "SNUFFLES."

DR. ZEMSHCHENKO has treated seventeen infants from two weeks to eleven months old with coryza by means of cocaine dropped into the nose. Two drops of a 2 per cent. solution were thus applied from four to six times a day with remarkably good results. In only one case was any increase of secretion observed. He has also made use of a 4 per cent. solution for older children. As, however, there is some risk of the solution being swallowed and producing vomiting, he finds it best to apply the cocaine by means of an ointment. In one case of suspected "snuffles" in a child three weeks old whose mother was syphilitic, the writer painted the nares with a 2 per cent. solution with a satisfactory result.

THE ASSOCIATION OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS.

THE Lord President of the Council has acknowledged the receipt of a letter from the Association, praying that the proposed new Charter of the College shall not be approved till the Fellows have had an opportunity of setting forth their views, which in many important respects differ from those adopted by a majority of the Council.

THE FRIENDLY SOCIETIES AND THE HOSPITALS.

THE Friendly Societies have recently made several demonstrations in support of the hospitals of London. Sometimes these take place on a Sunday, doubtless on the principle "the better day the better deed," and we fully recognise the goodness of the motive and of the service. But we are disposed to think that the bands would discourse their music more effectually for the purpose on some other day of the week—say on a summer Saturday afternoon.

DETECTION OF COPPER AND LEAD IN WINE.

A NEW method for testing the freedom of wines from cupric and plumbic salts has been put forward by H. Hager in the *Analyst*. The wine is mixed with half its volume of a clear solution of caustic soda which may contain carbonate. If the liquid remain clear after boiling, neither copper nor lead is present. A turbidity with colouration points to the presence of copper. About six cub. cent. of this solution are poured into a test tube, a piece of tin-foil introduced, and the whole heated for half an hour on the water bath. If lead and copper be absent, the foil remains perfectly bright; whereas if in the presence of a trace of one of these metals it becomes dull and grey for lead, and brown or brown-black for copper. This reaction may be applied to all cases when other metals are not present, and the solution remains clear after the addition of alkali.

SIR ANDREW CLARK.

THE profession will learn with regret that Sir Andrew Clark has been confined to bed for the past few days. But we are glad to be able to announce that, under the care of Dr. George Johnson, he is so far improved in health that he intends resuming his professional work on Monday. Sir Andrew will not take it ill from us if we venture to express the hope that he will use his indisposition as a sound excuse for refraining from working so hard.

DISARTICULATION OF THE HIP WITHOUT ANÆSTHESIA.

PROFESSOR GRUBE has recorded in the *Russkaya Meditsina* a case of disarticulation at the hip-joint for a large sarcomatous growth of the femur which weighed about sixty pounds, or nearly a third of the total weight of the patient. Distinct cardiac mischief being present, it was deemed necessary to avoid the use of an anæsthetic, also that of Esmarch's bandage. The patient was convalescent in seven weeks.

FATAL CASE OF PORRO'S OPERATION.

Il Morgagni of the 30th ult. relates the case of a primipara aged thirty-two, on whom Dr. Antonio Fibbi of Fabriano performed Porro's operation on April 15th. The patient had been in labour four days, and three days had elapsed since the membranes had ruptured. Delivery was blocked by a large tumour. The operation lasted a few minutes over an hour, and was unattended with complications. The pedicle was treated by the extra-peritoneal method. The patient died in collapse the day after the operation.

DIABETES IN THE DOG.

DR. PASQUALE FERRARO has recently (*Il Morgagni*, February and April, 1885) conducted a research on the comparative pathology of diabetes, in the anatomical institute of the University of Naples, under the direction of Professor Schrön. It results that diabetes mellitus may develop spontaneously in the dog, and gradually intensify until it becomes fatal. The etiology, clinical course, and histological anatomy of the disease, are similar in the human and canine species.

AT the Worship-street Police-court on the 9th inst., it was stated that the main drain in a certain road had been opened up for repairs by the Metropolitan Board of Works. The work had proceeded very slowly, and the drain had been fully exposed for the past three months, which was considered by the dwellers in the road to be an exceedingly long time for the necessities of the case. For many weeks the stench arising from the open drain had been unbearable. The magistrate, in reply to a gentleman who asked if anything could be done by the court to protect the inhabitants of the neighbourhood, stated his belief that the Board are liable to indictment for culpable delay, and advised that a solicitor be consulted.

THE King of Greece has recently conferred on Dr. Morris H. Henry, of New York, the Gold Cross, and created him an officer of the Royal Order of the Saviour. The honour was conferred for services rendered to medical science, on the recommendation of the Faculty of the University of Athens.

AT the forthcoming meeting of the British Medical Association, to be held at Cardiff on July 28th, 29th, 30th, and 31st, 1885, it is arranged that two subjects of considerable practical interest shall be discussed—namely, Mr. Treves (London) will introduce the subject of "Operative Interference in Intestinal Obstruction." Mr. Reginald Harrison (Liverpool) will read a paper introductory to a debate on "Bladder Tumours, their Diagnosis and Treatment." On the invitation of Dr. Bennett, the President of the Surgical Section, Professor Guyon of Paris has consented to be present and take part in the discussion on "Tumours of the Bladder."

AT the meeting of the Académie Royale de Médecine of Belgium, held on May 30th, Dr. Fleming, Principal Veterinary Surgeon to the Army, was elected a foreign correspondent. The Société Royale de Médecine et d'Hygiène Publiques has also elected him as a foreign correspondent. We are glad to learn that the health of Dr. Fleming is being gradually, though slowly, re-established, and that he is able to resume his important duties at the War Office.

A NEW edition of Dr. Murchison's work on Diseases of the Liver is in the press and will shortly be issued by Messrs. Longmans and Co. A new book by Dr. B. W. Richardson, entitled "The Work and Works on Health and Social Reform of Edwin Chadwick, C.B.," and a new work on "Children's Diseases" for popular use by Dr. C. West, will also be issued by the same firm in a short time.

ON the 4th inst. the medical officer of health for the Port of London obtained an order from the West Ham Police-court for the destruction of 463 carcases of sheep, 584 legs and shoulders of mutton, 70 pieces of beef, 20 bags of kidneys, &c., which were certified to be unfit for food. These formed part of the cargo of the steamship *Ruapehu.*

THE annual dinner of the Army Medical Department took place at the Holborn Restaurant on the 8th inst. Sixty-six officers, past and present, sat down, under the chairmanship of the Director-General. Sir William Jenner, who was to have been present as one of the guests, was unavoidably absent. A very pleasant evening was spent.

AN epidemic of cerebro-spinal meningitis appears to prevail in Dublin at present, and last week no less than eight deaths were recorded from the disease.

DR. WYCHERLY, High Sheriff for Cork, was knighted last week by Earl Spencer for his services in connexion with the recent visit of the Prince of Wales.

DR. JAS. J. L. RATTON, Surgeon-Major, Madras Army, has been appointed Professor of Surgery and Senior Surgeon at the General Hospital at Madras.

A CONVERSAZIONE will be held at the Royal College of Physicians, Pall-mall, on Wednesday, July 1st, at 9 P.M.

MR. VICTOR HORSLEY has been elected an Assistant Surgeon to University College Hospital.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC.—The Prince of Wales has fixed Saturday, July 4th, for the ceremony of opening the Albany Memorial and other buildings of the hospital in Queen-square. The Prince and Princess Christian have signified their intention to be present, and the Archbishop of Canterbury will take part in the proceedings.

THE METROPOLITAN HOSPITALS.

As the result of inquiries we have recently instituted, we are able to state that the following metropolitan institutions are, amongst others, at the present time hampered in their sphere of usefulness by want of funds.

In the City Orthopædic Hospital there are three wards, recently furnished, with twelve beds, which cannot be used. The applications for admission to these wards on behalf of helpless little cripples are very numerous, and it is most distressing that they should have to be refused. The committee were three years appealing for funds to open and complete these additional wards. At the British Lying-in Hospital, Endell-street, some thirty more patients per annum could be received did funds permit. At the Royal Orthopædic Hospital there are five beds vacant for want of funds. At St. Thomas's Hospital three wards, containing ninety beds, are closed. The Committee of the Hospital for Consumption and Diseases of the Chest at Brompton were compelled, to avoid closure of a ward, to sell out £2000 of their funded stock last year. At the Paddington-green Children's Hospital many cases are daily refused admission for want of more beds. If funds permitted additional accommodation could be obtained. At the Royal Westminster Ophthalmic Hospital there are twenty-eight vacant beds. At St. Mary's Hospital there are twenty-six beds vacant. At St. George's Hospital many applicants are refused admission for want of accommodation. At Charing-cross Hospital there are thirty empty beds. In the report which was presented at the meeting of the Governors of the North-West London Hospital on March 27th the committee state that hitherto all the beds and cots have been occupied, but that now the stern necessity of partially closing the hospital, unless additional help is forthcoming, must be faced. At the Hospital for Epilepsy and Paralysis the burden of debt is so heavy, and the necessity of immediately meeting some of the largest and oldest claims so urgent, that unless the public will enable this institution to place itself forthwith in an honourable and satisfactory position, the committee cannot feel justified in increasing or perpetuating the existing state of indebtedness, and will most reluctantly feel it their duty to close the hospital against all but paying patients. What this will entail upon the suffering classes concerned can only be fully known to those who are intimate with the distressing kind of diseases dealt with in this institution, diseases which cause the profoundest suffering both of body and mind, and often preclude the possibility of self-support. At the Poplar Hospital for Accidents there are no beds vacant from want of funds, but the number of beds will have to be reduced from want of cubic space, if funds are not forthcoming to build additional accommodation. As it is, the number of beds is insufficient to meet the demands made upon them. At the Chelsea Hospital for Women the "Albert Edward" floor of twenty beds is entirely vacant for want of funds. At St. Thomas's Hospital, in addition to the empty beds mentioned above, two wards have been, through lack of funds, appropriated to the use of paying patients; and at Guy's, too, a similar expedient has for the same reason been adopted. At the London Hospital, where the number of in-patients treated last year was no less than 8015, the number of beds is [illegible], and the average fully occupied during last year was [illegible]. If the funds were larger more beds would be occupied, but there is no absolute rule that more than a certain number shall not be filled. In emergency, or in case of grave sickness, any person is admitted, it being trusted that the generosity of the public will supply the necessary funds. At this hospital there is a steadily increasing pressure as population increases, and as, indeed, it may be said with much regret the people become poorer. At the Evelina Hospital for Sick Children the committee have been compelled, in order to meet the deficit of the previous year, to trench upon the small invested capital of the hospital to the extent of £1000. Notwithstanding this sacrifice the balance-sheet shows a considerable deficit on the past year. At the London Lock Hospital and Asylum there are about fifty beds vacant from want of funds in the female department. At the London Fever Hospital, though no beds are unoccupied through lack of money, the isolation block, a most useful and necessary part of the establishment, is unused for that reason. At University College no beds are vacant, but the committee are obliged to depend upon the public and upon loans from their bankers to tide over their immediate pressing necessities. The debt of the hospital at the present time is over £7000.

It may be added that at St. Thomas's Hospital 79,019, and at the London Hospital 64,598 out-patients were treated last year, and that the total number of beds at the hospitals which derive benefit from the Hospital Sunday Fund is about 8000.

THE SANITARY CONFERENCE AT ROME.

SINCE our last issue the proceedings of the Technical Commission have been placed on a much more satisfactory footing. All the work is now submitted to sub-committees which hold morning sittings and prepare definite series of propositions, and these are then discussed and voted on separately by the full assembly. A record of the proceedings of last week's work will, therefore, be made more conveniently under the heading of each separate piece of work.

First came the report of a committee consisting of Drs. Eck, Hofmann, Thorne, Semmola, Koch, Proust, and Sternberg on Disinfection, and after discussion its provisions were accepted with only a few verbal alterations. The committee, desiring simplicity above all things, recommended for purposes of disinfection only three measures: (1) by steam under pressure, a system specially adapted to steamers; (2) carbolic acid or chloride of lime as chemical agents; and (3) efficient aeration; and they then entered into details as to the various methods of applying these agents to different objects and under varying circumstances. The report is one which is in the main fully in accord with the principles held in England, and it received the support of the English and Indian delegates.

Another sub-committee, consisting of Drs. Buonomo, Eck, Hunter, Koch, Lewis, and Zaëros Pacha, prepared a report on the measures to be adopted in connexion with the Pilgrimage to Mecca. The constitution of the committee will at once show that the interests of our great Indian Empire were well represented, and it is not too much to say that the report submitted was, up to the point of entrance of the pilgrims into the Red Sea, in the main an adaptation of the excellent sanitary regulations which have long been enforced in India. On some points India has not yet felt it right to interfere with religious convictions; but now that it appears from the statement of the Turkish delegate that the Mussulman creed is in no way affected by a requirement that no pilgrim should be allowed to start on his journey unless he can show that he possesses adequate means for the journey, it is much to be hoped that this very important condition will be universally acted on. Such a step will result in the saving of much life. As regards the measures to be adopted in the Red Sea, the delegates from this country assented to the propositions of the committee. It had several times been urged, as for example by Sir Guyer Hunter, that each country should be allowed to act on its own views as regards arrivals in its own ports, and hence where Turkish ports in the Red Sea were concerned, it was explained by Sir Joseph Fayrer that whilst he and his colleague thought that many of the restrictions imposed were needless and hence vexatious, yet that no opposition would be offered by delegates from this country. The assistance given to the Conference by Dr. Lewis's wide knowledge of this special subject was evidently of influence in securing a report which was accepted almost without modification.

Next came a report from a sub-committee as to the action necessary in ports of arrival, and, as in the case of the Red Sea Commission, we may congratulate ourselves that it contained *no English blood amongst its members. So hopelessly* had the committee tried to win both sides that the report was utterly rejected, and the committee were sent back to their labours. The next report they submitted was a substantial advance on the first. It gave free admission to a certain class of vessel even from so-called suspected ports, provided a medical inspection showed that after a certain length of journey there had been no illness, and that all needed measures of cleanliness, &c., had been observed. But if the journey had lasted less than ten days, all the crew and passengers had first to be kept under observation for twenty-four hours. As to infected ships, the sick were very properly to be landed and isolated, but this, too, was coupled with a regulation enjoining a period of from twenty-four hours to five days' observation for all on board if during any part of the voyage any person was suspected of having had cholera. This detention of healthy people was protested against by Dr. Thorne, who maintained that the English system of detaining only persons actually suspected of being ill for a period sufficient for the symptoms to develop themselves was ample. He was supported by all his colleagues from this country; but in view of the notions prevailing on the Continent, they were necessarily in a minority. Then came a genuine *fiasco*. What was to be done with the people who were landed? A committee, composed of such men as Drs. Koch, Baccelli, and Rochard, had actually prepared four propositions as to douching and bathing them. The ridicule cast by the Indian and British delegates on such a proposal secured them a strong following; and when, finally, Sir Guyer Hunter asked the committee to explain how they would bathe and douche nearly 2000 men, women, and children on board our great troopships, the committee thankfully accepted a suggestion that all the four propositions should be erased, and they were at once struck out as fit only for the waste-paper basket. As a general principle, the delegates from this country voted in the negative as to the imposition of quarantine of the healthy, whether under the name of observation or not, and then *declined to take part in any divisions that took place* as to the details relating to those measures.

Passing over certain matters of minor importance, the subject of the proceedings to be adopted after landing was dealt with by another sub-committee, composed of Drs. Sonderegger, Buonomo, Thorne Thorne, Eck, Ruysch, Grozs, and Hofmann. The report presented by this sub-committee was, like others where English and modernised views were represented, a valuable one, and, with the exception of the circumstance that it was regarded by Dr. Koch and others as entering into certain details which it would be better to leave to each country, it was practically accepted as a whole. English views were represented in its first paragraph, which claimed that the prevention of cholera was, above all things, to be dealt with by the sanitary development of a country and means of isolation, all of which should be ready in advance. This point was enforced by Dr. Thorne Thorne, who explained that in her action against quarantine England was not influenced by pecuniary motives, and that her authorities had since the date of the Vienna Conference spent over £27,000,000 in the interests of human life and health; and he showed by statistics of mortality how truly remunerative this expenditure had been. He added that it would be a lamentable day for England if she should ever think of changing such a system for the useless five days' quarantine which seemed to find such favour with the Conference. Following on a series of resolutions as to sanitary organisation, notification of first cases, &c., all of which are excellent, came certain details as to international trains, their inspection and cleansing, the provision of means of temporary isolation at stations, &c. Our delegates found no difficulty in accepting these on the ground that measures of precaution and cleanliness were always valuable; but Dr. Timothy Lewis explained to the Conference that the construction of railways in India had in no way altered the ancient lines of cholera diffusion, and Dr. Koch and others considered some of the details proposed as to train service quite superfluous. Sir Joseph Fayrer gave some valuable statistics as to the effect of sanitation in India, urging the Conference to put their trust in these rather than in detailed regulations as to traffic; and he was supported by Sir Guyer Hunter, who reverted to details bearing in the same direction which he had given at a previous sitting.

The work of the Technical *Commission came to an end on* Saturday last, and since the full Conference did not again assemble *till* Thursday, the Government have asked the delegates to be the guests of the State during a visit to Naples, special trains, and a man-of-war in the bay, being provided by the Government.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5892 births and 3497 deaths were registered during the week ending June 6th. The annual death-rate in these towns, which had been equal to 21·1 and 21·0 per 1000 in the preceding two weeks, further declined last week to 20·5. During the first nine weeks of the current quarter the death-rate in these towns averaged 21·8 per 1000, against 22·6, the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 10·0 in Brighton, 10·9 in Norwich, 13·2 in Wolverhampton, and 13·5 in Halifax. The rates in the other towns ranged upwards to 25·5 in Preston, 26·3 in Birkenhead, 31·0 in Newcastle-*upon-Tyne, and 33·6 in Manchester. The deaths referred to* the principal zymotic diseases in the twenty-eight towns, which had been 510 and 487 in the previous two weeks, rose to 521 last week; they included 224 from measles, 130 from whooping-cough, 32 from diarrhœa, 37 from small-pox, 44 from "fever" (principally enteric), 23 from diphtheria, and 31 from scarlet fever. No death from any of these zymotic diseases was recorded last week in Brighton, Norwich, or Halifax; whereas they caused the highest death-rates in Sheffield, Manchester, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Birkenhead, Sheffield, Manchester, and Newcastle-upon-Tyne; from whooping-cough in Cardiff, Plymouth, and Blackburn; from scarlet fever in Leicester, Sunderland, and Cardiff; and from "fever" in Portsmouth and Newcastle-upon-Tyne. *The 23 deaths from diphtheria in the twenty-eight towns included 15 in London and 2 in Hull. Small-pox* caused 59 deaths in London and its outer ring (exclusive of 23 recorded in the metropolitan asylum hospital ships and camp at Darenth), 2 in Manchester, and 1 in Hull. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had steadily increased in the preceding ten weeks from 830 to 1389, declined to 1201 at the end of last week; the admissions, which had ranged between 354 and 211 in the previous five weeks, fell to 180 last week. The Highgate Small-pox Hospital contained 68 patients on Saturday last, 19 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 291, 305 and 302 in the preceding three weeks, declined last week to 290, but exceeded the corrected weekly average by 20. The causes of 90, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Portsmouth, and Brighton, and in five other smaller towns. The largest proportions of uncertified deaths were registered in Oldham, Sheffield, Blackburn, and Bolton.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 23·4, 21·2, and 20·5 per 1000 in the preceding three weeks, rose again to 21·8 in the week ending 6th June, and exceeded by 1·3 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 12·2 and 16·5 in Leith and Aberdeen, to 25·1 in Glasgow and 25·4 in Greenock. The 532 deaths in the eight towns showed an increase of 32 upon the number in the previous week, and included 23 which were referred to whooping-cough, 16 to diarrhœa, 15 to measles, 11 to scarlet fever, 6 to diphtheria, 3 to "fever" (typhus, enteric, or simple), and not one to small-pox; in all 74 deaths resulted from these principal zymotic diseases, against 67 and

59 in the preceding two weeks. These 74 deaths were equal to an annual rate of 3·0 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 22 and 27 in the preceding two weeks, declined again to 23 last week, which included 12 in Glasgow, 6 in Edinburgh, and 3 in Dundee. The 16 deaths attributed to diarrhœa showed an increase of 6 upon the number in the previous week, but were equal with the number in the corresponding week of last year. The deaths from measles, which had been 19, 15, and 11 in the previous three weeks, rose again to 15 last week, of which 14 occurred in Glasgow. The 11 fatal cases of scarlet fever showed a considerable increase upon the numbers in recent weeks, and included 4 in Glasgow, 2 in Edinburgh, 2 in Leith, and 2 in Paisley. Four of the 6 deaths from diphtheria were returned in Glasgow. The 3 deaths referred to "fever" showed a decline from recent weekly numbers, and were considerably below the average number. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 107 and 87 in the preceding two weeks, rose to 126 last week, and exceeded by 36 the number returned in the corresponding week of last year. The causes of 74, or nearly 14 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 35·0, 31·2, and 25·7 per 1000 in the preceding three weeks, further declined to 23·1 in the week ending June 6th, and was considerably lower than in any previous week of this year. During the first nine weeks of the current quarter the death-rate in the city averaged, however, no less than 30·8 per 1000, the mean rate during the same period not exceeding 20·5 in London and 18·6 in Edinburgh. The 156 deaths in Dublin last week showed a further decline of 18 from the high numbers in recent weeks, and included 9 which were referred to measles, 2 to whooping-cough, 2 to diarrhœa, 1 to scarlet fever, 1 to "fever," and not one either to small-pox or diphtheria. Thus 15 deaths resulted from these principal zymotic diseases, against 34, 33, and 21 in the preceding three weeks; these 15 deaths were equal to an annual rate of 2·2 per 1000, the rate from the same diseases last week being 3·2 in London and 2·7 in Edinburgh. The fatal cases of measles in Dublin, which had been 17 and 13 in the previous two weeks, further fell to 9 last week, and were fewer than in any week since the middle of February last. The deaths from "fever" and from scarlet fever also showed a further decline from recent weekly numbers. Only one inquest case and 1 death from violence were registered within the city. Nearly a quarter of the deaths occurred in public institutions. The deaths both of infants and of elderly persons showed a further considerable decline from the numbers in recent weeks. The causes of 26, or nearly 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Honorary Brigade Surgeon W. F. Ruttledge, now on retired pay, has been appointed to take charge of the 1st Infantry Brigade at Aldershot.

Thirty-five officers undergoing a course of instruction in Medical Staff Corps drill, &c., at Aldershot are attached for a course of instruction in riding, 20 to the Cavalry Brigade, 10 to the Royal Artillery, and 5 to the Commissariat and Transport Corps.

War Office.—The Secretary of State for War has appointed Howard W. Hunt, Esq., M.R.C.S., to be Visiting Surgeon for Shorncliffe, under the Contagious Diseases Acts, 1866 to 1869, vice J. W. Howard, deceased.

Army Medical Staff.—Brigade Surgeon W. O'Halloran has retired on temporary half-pay; Surgeon John Sydney Langton resigns his commission.

Admiralty.—The following appointments have been made:—Fleet Surgeon Garland W. L. Harrison, to the *Excellent*; Fleet Surgeon Daniel O'Connor, M.D., to Devonport Dockyard; Staff Surgeon Fleetwood Duckle, M.D., to the [illegible]; Surgeon James Porter, M.B., to the *Pembroke*; Surgeon John Cashin, to the *Duncan*; Surgeon Timothy J. [illegible], M.D., to the *Royal Adelaide*.

Yeomanry Cavalry.—Cheshire: George Harrison, Gent., to be Surgeon.

Artillery Volunteers.—1st Northumberland and Sunderland:—William Henry Besant, Gent., to be Acting Surgeon.

Rifle Volunteers.—1st Bedfordshire: Acting Surgeon Henry Frederick Holland, M.D., to be Surgeon.—10th Lanarkshire (Glasgow Highland): Angus Macphee, Gent., M.D., to be Acting Surgeon.—2nd Sussex: Walter Samuel Simpson, Gent., to be Acting Surgeon.—1st Volunteer Battalion, the Prince of Wales's Own (Yorkshire Regiment): Acting Surgeon Alfred Baker to be Surgeon.

Correspondence.

"Audi alteram partem."

ADDISON'S DISEASE.

To the Editor of The Lancet.

Sir,—Dr. Wickham Legg, in his interesting communication to your journal on Addison's disease, says that the theory which makes it a tubercular affection of the supra-renal bodies must be given up. I am somewhat at a loss to know whether Dr. Legg is arguing solely against the opinion that the change *usually found in the adrenals is strictly* tuberculous, or whether he is denying the truth of the usually received theory of the nature of the disease, and which in common parlance is often spoken of as tuberculous. If Dr. Legg writes merely to maintain the former, I agree with him, but if the latter, I am sorry to find myself at variance with him. Addison's first published cases were examples of what was then called tuberculous disease, but the author did not state that this condition was characteristic of the disease; it was left for myself, by an accumulation of a large number of cases, to insist upon the fact, and therefore reduce morbus Addisonii to a very strict definition as regards the changes in the organs. I maintain that the disease was primary and of one kind. This view I further propounded in the article on Morbus Addisonii in Reynolds's System of Medicine. It was shortly as follows:—

In Addison's disease there is found a total destruction of the adrenals, the consequence of a primary or essential disease, which is comparable with that of the primary affections of other organs. In considering the diseases of other double organs, we do not refer to their accidental implication by new growths, but to the slow implication of their structure by a primary morbid process. Indeed, I know of no instance where both lungs would be involved to their destruction without a trace of similar disease elsewhere, or of a uniform implication of the kidney, and the rest of the body free. Were I, indeed, to meet with such cases, I should regard the disease as one essentially primary. In the same way, I have no knowledge of any adventitious disease attacking both adrenals to their destruction, and showing no trace of its existence elsewhere. From what I know of pathological processes, it seems to me that a disease involving the entirety of both adrenals, and leaving the rest of the body untouched by it, must be a primary affection of those organs. It would therefore not be tubercular. This fact, too, would also imply more—that the disease would be of a similar nature to that found in the other viscera, especially the double organs. Now, the slow process which gradually involves the parenchymatous structures is usually called inflammatory, and the same term may be with equal truth applied to the process which destroys the adrenals. The chronic primary affections of the lungs are of a similar nature to those seen in cirrhosis of the liver, and called interstitial hepatitis, or in the kidney, and called interstitial nephritis, or in the spinal cord, and styled sclerosis, the process being modified according to the structure of the organ. In the adrenals the organs may sometimes be found increased to three or four times their ordinary size, owing to the production of an albuminous material composed of fibre and cell elements. At a later period this material undergoes caseation, cretification, and softening, and at the same time the mass is much reduced in size, so that in very long-standing cases of morbus Addisonii, nothing but a few nodules of cheesy matter may be found, or a few grains of chalk, or perhaps a thimbleful of creamy fluid. In looking at these cases it is evident that a few more months would have seen the whole of this morbid material disappear. This sometimes occurs, as in one of the best-marked cases of the disease which I have seen, the one referred to by Dr. Legg as presented to the Pathological Society by Dr. Eastes, and several other similar cases have been reported. I do not look upon this termination as surprising, but as inevitable, and I see no reason why the same should not occur in other organs if they were nonvital. The adrenals are not vital organs in the ordinary sense, seeing that persons live without them for many years, although it is equally true that when diseased they bring about death in a slow and insidious manner. We see the liver waste in the cirrhotic state, and, as regards the kidneys, we sometimes find them in Bright's disease reduced to their minimum size compatible with the existence of life. In the case of the thyroid, the glandular structure may altogether disappear, and as a result of inflammation of the testes every trace of the organ may have gone.

I would say therefore, in conclusion, that if Dr. Legg merely wishes to maintain that the affection of the adrenals so usually found in morbus Addisonii is not tubercular, I cannot but agree with him, having always insisted upon the same fact; but if his paper is written with the object of contravening the views which I have just stated, that the disease of the organs is essentially of one nature, and of that character which has mistakenly been called tubercular, then I am at variance with him. From a study of a large number of cases over many years I have formed the opinion which I have given, and I regard the cases which Dr. Legg has described as highly confirmatory of this view. His paper and remarks thereon are very interesting, and the truth can only be arrived at by a thorough criticism of this kind, but my conclusions drawn from his illustrations are, I am sorry to say, totally different from Dr. Legg's. He would say that, inasmuch as we sometimes see cases of Addison's disease where no trace of the adrenals can be found, the usual theory of their so-called tuberculous nature must be given up. I, on the contrary, would say that the total absence of the organs in very chronic cases proves to my mind indisputably that such process (so-called tubercular) and none other must have led to it.

I am, Sir, yours obediently,

Grosvenor-street, June, 1885. SAMUEL WILKS.

TREATMENT OF ACUTE PERITONITIS BY ABDOMINAL SECTION.

To the Editor of THE LANCET.

SIR,—The abstract of Mr. Treves' paper on this subject, given in THE LANCET of March 14th, gives doubtless a complete view of that gentleman's opinions and action in the particular case narrated, though it does not contain anything more than a slight allusion to a previous work on the subject; but it is quite enough to convince me that he has taken an insufficiently wide grasp of this important advance in abdominal surgery, and that he is not aware of the fulness of the reception which has already been accorded to the practice which he suggests as being proper for cases of acute general peritonitis. So far as I know, the first record of an operation performed deliberately on account of acute peritonitis was proposed and carried through by Dr. Wiltshire in 1868. An account of the case will be found at page 294 of the recent edition of my book on Diseases of the Ovaries, where I say: "I think sufficient praise can hardly be given to Dr. Wiltshire for his courage in performing the operation under such urgent conditions, and it is not too much to say that to his success in this case we owe a new departure in the practice of abdominal surgery by which operations under acute symptoms are undertaken, and apparently with results as satisfactory as those obtained in cases free from emergency." This has long since become the established practice, and I should think that some scores of cases are now on record where it has been completely and successfully adopted.

It is now some twelve years since I myself for the first time followed Dr. Wiltshire's example, and after I had done so I naturally asked myself the question, Why should I limit my operations to cases of peritonitis in which the disease is complicated by an ovarian tumour? Since that time I have never allowed a patient to die of peritonitis without opening the abdomen, if I could obtain the consent of my colleagues and the patient's friends, and that consent has very rarely been withheld. The results of the great majority of these operations have been published in detail under various headings, because it has rarely been found that the cause of the peritonitis could not be ascertained, and under the head of the cause each case has been recorded, leaving only two instances in which the cause was not ascertained, and which were therefore recorded as operations for acute peritonitis. I have not made an accurate research into my record for the purpose of this paper; but I believe my statement is nearly correct when I say that I have opened the abdomen forty-four times on account of the presence of peritonitis, and that the operation has been completely successful in forty-one of the cases.

This leads me to say that Mr. Treves' case is open to a criticism on two points to which I desire to draw emphatic attention; because, though I give him most willingly all credit for the success of the case so far as it has gone, I *think that success is due more to good luck than to good* guidance. He tells us the patient was admitted to the hospital "on Jan. 21st, suffering from chronic pelvic peritonitis following severe gonorrhœa." Sufficient has been put upon record concerning this condition to make it perfectly certain that this patient was suffering from pyosalpinx; and if any further proof is needed, we have only to pass on two sentences, and find that the abscess was on the left side, where it always is if pus exists at all in the Fallopian tube. The case was clearly one of antecedent rupture of a suppurating tube, with the formation of a limited abscess, the secondary rupture of this abscess being the cause of the peritonitis. The first point of criticism is, therefore, that this patient ought to have been operated upon within three or four days of her admission to the hospital, and should not have been allowed to go on till Feb. 26th merely for the purpose of running the gauntlet of an attack of acute peritonitis. The second point of criticism is that Mr. Treves has not—at least he does not tell us that he has—removed the Fallopian tube. If the rent, which undoubtedly occurred in it, was sufficiently large and satisfactory to allow for a vent and the healing of the tube, then perhaps the patient may escape without further trouble. But the experience of those of us who have had a large number of these cases to deal with is that a case so incompletely treated as this will simply be the subject of further trouble by-and-by, when the removal of the tube will be a difficult and risky proceeding.

I am, Sir, your obedient servant,

Birmingham. LAWSON TAIT, F.R.C.S. Eng.

AURAL EXOSTOSES.

To the Editor of THE LANCET.

SIR,—In answer to Mr. Dalby, I beg to state that I have never claimed any originality for the operation for the removal of aural exostoses. On the contrary, I have always mentioned the name of Dr. Arthur Matthewson[1] of Brooklyn, New York, as being entitled to all the credit that is due in this matter. Dr. Matthewson some years ago kindly sent me his pamphlet, in which he carefully describes his first case (1876), and from this paper I got my idea of the operation.

Mr. Dalby says that from 1874 he has employed the drill, and in 1876, in THE LANCET, he states, "The operation consists in grinding the bone away, and the most satisfactory appliance for this purpose I find to be the drill which is in common use among dentists." But he has not published any cases for our guidance describing the details of the operation, and I was certainly under the impression that Dr. Matthewson's was the first case. That I am not singular in this opinion, I would refer to the authors[2] indicated below, who in this connexion never mention Mr. Dalby's name, for they doubtless have all of them missed so brief a notice of what is really a tedious and capital operation.

In the last edition of Mr. Dalby's work, published this year, he tells us nothing that adds to our knowledge, except, he says, that at the International Medical Congress held in London, Aug. 1881, "I called attention to the fact that in a very large proportion of these cases the subjects of the growths had been for many years addicted to sea-bathing." A fact that I was the first to demonstrate at least six months before.[3]

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[1] THE LANCET, July 20th, 1878; Jan. 8th and 16th, 1881; Jan. 31st and April 1st, 1882; and May 30th, 1885; and British Medical Journal, Nov. 24th, 1883.

[2] *Roosa*: Treatise on Diseases of the Ear, sixth edition, p. 453. Barr: Diseases of the Ear, p. 213. Buck: Diagnosis and Treatment of Ear Diseases, p. 118. Macnaughton Jones: Aural Surgery, p. 12. McBride: A Guide to the Study of Ear Diseases, p. 46. Politzer's Text-book of Diseases of the Ear, p. 623 (Cassell). Burnett: A Treatise on the Ear, second edition, p. 306. Cumberbatch: St. Bartholomew's Hospital Reports, 1880. Pomeroy: Diseases of the Ear, p. 117.

Mr. Dalby was present on one occasion when I operated, and in three of my cases of aural exostosis I had the advantage of a consultation with him.

I am, Sir, yours truly,
GEORGE P. FIELD.

Lower Seymour-street, June, 1885.

ON ACQUIRED IMMUNITY FROM INFECTIOUS DISEASE.

To the Editor of THE LANCET.

SIR,—While Dr. Sternberg, in his paper entitled "What is the Explanation of Acquired Immunity from Infectious Diseases?" in THE LANCET of April 11th and 18th of the current year, does not directly claim originality for the "vital resistance theory," a claim is at least implied by his statement that his work antedated that of Grawitz and Salmon. Dr. Sternberg's paper was read at the meeting of the Clinical Society of Maryland held on Dec. 5th, 1884. In it he bases his claim to priority upon a paper published in the *American Journal of the Medical Sciences*, April 1st, 1881. In the discussion which followed, I had the honour to show that at the annual meeting of the Medical and Chirurgical Faculty of Maryland held in April, 1875, I had read a paper (published in the Transactions of the Faculty for that year) in which the theory of immunity expressed by Dr. Sternberg in his paper was distinctly and explicitly propounded. This was publicly admitted by Dr. Sternberg at the meeting at which his own paper was presented. As Dr. Sternberg, while mentioning those who followed him, has neglected to refer, even in a footnote, to my publication antedating his own by six years, I beg that you will favour me by printing the enclosed extract from my paper, a reprint of which I have also the honour of sending.

I am, Sir, your obedient servant,
J. E. ATKINSON, M.D.

University of Maryland, Baltimore,
May 8th, 1885.

Extract.

"It has been stated that all the parts of the tissues of the body whose molecular motion was such that the consequence of their union with the contagious particles was to degrade them until they were unfit for their normal functions were thrown off from the body, and that there were left behind only such portions as were able to repel the contagia, or, having united with them, were able, while undergoing a certain modification themselves, to also modify the life of the contagia, so that the union would result in matter, somewhat altered it is true, but not to such an extent as to interfere with the performance of proper normal function. The body will thus have gotten rid of all matter capable of being degraded by the contagium of the given specific fever. In the course of the subsequent nutrition of this individual, there must be a constant and almost unvarying supply of new material introduced from without. It has been seen that within the system, and endowed with life, this material is termed protoplasm. Now the mere fact of proteinaceous compounds gaining access to the circulation does not confer upon them the properties of this protoplasm. ... ... On the contrary, it must be that, as these matters enter the circulation, they may not attain the dignity of protoplasm until life shall have been conferred upon them by their incorporation with the protoplasm already existing in the body, with the buds and gemmules split off from the larger masses, and which, thus nourished, increase in size and develop the properties of their progenitors. Understanding, then, that these buds and gemmules are all descended from the protoplasm that has already resisted or been modified by the especial contagium particle, it is perfectly evident that they and their descendants must possess the same qualities of resistance. At the same time, it will not be difficult to imagine that this condition, being one opposed to the perfectly normal life of the cells of the body, may after a time, in consequence of a steady and persistent tendency to regain the condition enjoyed before infection, be receded from, and the individual again acquire his susceptibility to the same eruptive fever that he has already experienced. In the same manner may we account for the fact that the occurrence of the diseases in the parent does not necessarily or usually confer immunity upon the offspring; that a certain protection is conferred we know, since the eruptive fevers almost always produce their most dire effects upon virgin populations. The history of epidemics in the Pacific Islands exemplifies this. It is even probable that several diseases, the causes of dreadful mortality in centuries gone by, have disappeared in consequence of an immunity gradually inherited. In spite of this, however, it is very probable that in the reproductive processes the inheritance of perfectly normal molecular motion tends to reassert its superiority over that of a recently acquired modified motion, and that it returns to the mode of life that appertained to the parent previous to the occurrence of the eruptive fever, just as the parent would return, and sometimes does, were his vital processes as active."

HEALTH ASSURANCE ASSOCIATIONS.

To the Editor of THE LANCET.

SIR,—As imitation is the sincerest flattery, I suppose I ought to feel flattered by the fact referred to in your leading article of the 30th ult., that no fewer than three of these associations have been started within the last few months. I do not feel flattered however, I am simply grieved—not because of the fact that these societies have adopted my scheme as far as they can, and one of them has even appropriated the name which I have given to the system without the slightest acknowledgment, but at the misapplication of the scheme, and at the further loss and damage which the profession in particular is sure to suffer if these associations are to be allowed to grow.

On what grounds are my objections based? On these:—The formation of an "Association" for the working of health assurance is not only absolutely unnecessary but positively mischievous—first, by increasing the cost of working the system; and, secondly, by taking the control of the fees out of the hands of the medical practitioner. These are two of the evils of the provident dispensaries, and in these new associations they will be greatly magnified.

First, the cost of working. Where are the expenses of rent of offices, salaries of the secretary and clerks, commissions of agents, and other disbursements to come from? Is it not clear that if the fee charged to an assurer for medical attendance be 20*s*. per annum, not more than 15*s*. will find its way into the pockets of the medical attendant? Why should medical fees be thus divided and the profession or the public robbed?

Secondly, the doctor's loss of control over his fees. That this is an evil only too real, the medical officers of provident dispensaries and the various amalgamated friendly societies can bear witness; but the evil is trifling in amount compared with what it will be if the promoters of these aggressive companies are to have their way. One would have thought that the profession had already learned a lesson on this point which would have made it jealous of its rights and duties for the future; but it seems the lesson has not yet been severe enough. I have elsewhere shown that the one remedy *par excellence* for the evils of clubs and many other evils besides is health assurance—not health assurance "associations." For the working of life assurance and the various schemes of assuring against the losses of accident and sickness, associations are really necessary; but a serious blunder is committed if it be assumed that health assurance can be advantageously worked in the same way. Nor does the blunder affect the medical profession alone. One of the great advantages of health assurance is that the patient is brought into an intimate and friendly relation with his client, in whose health he becomes interested from the moment when the first fee is paid, and he has many and regular opportunities—at the periods of payment for example—of seeing the assurer and his dwelling, observing his state of health, advising him thereon, and detecting the beginnings of disease. Is this a picture of the state of things likely to obtain under a middleman, *alias* an "association"? If the medical profession persists in its policy of indifference and *laissez-faire*—which has already proved so disastrous—in matters so nearly concerning its best interests and those of the public, of whose health it ought to be the custodian, the punishment will be as certain as it will be richly deserved.—I am, Sir, yours truly,

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[3] THE LANCET, Jan. 8th, 1881.

W. FLEMING PHILLIPS.

St. Mary Bourne, Andover, Hants, June 6th, 1885.

"SINGULAR MEDICAL EVIDENCE."

To the Editor of THE LANCET.

SIR,—Under this "singular" heading I was astonished to see a notice in your issue of June 6th of an article which appeared in the *Echo* regarding the medical evidence given at an inquest held in Poplar on May 28th. I may state briefly that the *Echo* has given an entire misrepresentation of the whole matter. In the first place, there was no "fatal fight at Poplar" at all; and, in the second place, I did not say what in the account referred to I was reported to have said.

The facts are simply these:—An old man was peacefully driving a barrow along the road, when a drunken man, an utter stranger, rushed up, struck him heavily under the jaw so that he fell backwards, striking the back of his head with great violence on the ground, and was picked up dead. On making a post-mortem examination, I found the cause of death to be cerebral hæmorrhage from the violence of the concussion, well-marked atheroma of the vessels greatly predisposing to the result. I found also advanced renal disease and cardiac hypertrophy. In describing the skull and brain appearances, I mentioned that on removing the skull-cap quite an unusual amount of thick fluid *escaped* from the sinuses, &c. I could not measure it, as most had oozed out, but my assistant and myself roughly estimated there might be nearly a pint; however, I could form no exact estimate of the amount. I subsequently went on to describe the usual signs of cerebral hæmorrhage which I found.

I can only ascribe the insertion of the article in question to lack of sensational matter, but I do not feel particularly ambitious to be chosen as the subject of such fictitious reports.

I am, Sir, your obedient servant,

W. MURRAY LESLIE, M.B., C.M.Edin.

Cubitt Town, E., June 10th, 1885.

⁂ We do not see that our correspondent has any material ground of complaint, as our remarks practically agree with his own version of the matter.—ED. L.

MANCHESTER.

(*From our own Correspondent.*)

CHARITY ORGANISATION IN MANCHESTER.

AT the last meeting of the Manchester Statistical Society a paper of considerable interest to the profession was read by Mr. F. Scott upon Charity Organisation in this city. He stated that the total sum received annually by forty-two voluntary institutions was nearly £150,000, and that, comparing this sum and the machinery provided therewith, the total results were much below what they might be if the various charities were working more or less together. He pointed out that this was especially the case with the hospital charities. Economical administration would be largely promoted by co-operation. He suggested that a kind of federal council should be formed, made up of representatives elected by the subscribers to the different institutions, which council should be subdivided into committees and subcommittees, to superintend the details of the working of each charity, such committees to report to and be controlled by the general council, whilst the main body would legislate and control all matters of common interest. The debate was carried on by a number of gentlemen interested in our charities, amongst whom was the Dean of Manchester, who gave it as his opinion that our organisations were worked too much on the lines of competition, that by too much subdivision there was a loss of power, and that much good would be effected by more combination amongst them.

THE FORTHCOMING CONFERENCE AT BLACKPOOL.

At a preliminary meeting of representatives of Boards of Guardians, held last week in the Town Hall, to consider the programme for the conference to be held at Blackpool, the Lunacy Laws Amendment Act was under discussion, and it was noted with satisfaction that the Lord Chancellor had made several important amendments in the Bill, which had brought it into more harmony with the views of various boards of guardians who had made representations concerning the unworkable nature of some of the clauses. There has lately been some little trouble in dealing with pauper lunatics here; hitherto it has been the habit of the magistrates to remit pauper lunatics to the workhouse, where they were kept for a time under observation, and, if confirmed lunatics, were then removed to an asylum. The master of the Manchester Workhouse has, however, lately notified to the guardians that he must in the future refuse to admit lunatics to the workhouse, it being illegal to do so, nor have the magistrates power to order them there. Amongst the subjects set down for discussion at the coming conference at Blackpool is that of hospital accommodation for infectious diseases, and as most of the rural sanitary authorities are formed from boards of guardians, it is one that may be discussed there with considerable advantage.

THE SALE OF HORSE-FLESH.

For some little time past disquieting rumours have been abroad as to the illicit sale of horse-flesh, and the subject has occupied the attention of both the Salford and Manchester Town Councils. At the last meeting of the latter, it appeared that certain regulations which the Market Committee had contemplated putting in force with a view to check this imposition on the poorer classes had failed to receive the sanction of the Local Government Board, on the ground that the power sought by the Corporation was not merely an amendment or addition to any existing Act, but was virtually new legislation, for which there was no precedent.

DEATH OF DR. THORBURN.

Again we have to mourn the loss of one of the leaders of the profession in the comparatively sudden death of Dr. Thorburn. His loss will be felt among a large number in and around Manchester; his genial kind-hearted disposition had endeared him to students, colleagues, and patients. By his death another gap has been made in the professorial staff at Owens College, where he occupied the chair of Obstetrics and Diseases of Women. At the infirmary a vacancy is also caused, where he held the post of Obstetric Physician. It had for some time been known to his friends that he suffered from heart disease, but none suspected the end was so near. Pulmonary thrombosis suddenly laid him low and he died in little more than a week from the first onset The continuation of the course of lectures he was engaged on at the College has been arranged to be completed during the present session by members of the staff of St. Mary Hospital.

SIR HENRY ROSCOE.

It is not improbable that ere long the College will lose the active services of another old and valued professor, Sir Henry Roscoe, who has been asked to become a candidate for parliamentary honours at the ensuing general election Should he be elected, his time available for College work will necessarily be very limited; but his presence in the House of Commons would undoubtedly be a great acquisition to the scientific element, which at present is too scantily represented there.

SMALL-POX.

The outbreak of small-pox which occurred here some few weeks since has not assumed very large proportions, and so far the authorities have had no difficulty in providing sufficient hospital accommodation. Up to the present time the cases have chiefly arisen in Manchester, and the bulk of these in the northern part of the city. Very few cases have as yet occurred in the neighbouring borough of Salford.

At the last meeting of the Chorlton guardians tenders were received for the extension of their hospital at Withington, to the amount of nearly £15,000.

Manchester, June 8th.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

NEWCASTLE CATHEDRAL NURSING SOCIETY.

THE second annual meeting of the Cathedral Nursing Society has been held. This Society does a large amount of good in a quiet manner amongst the sick poor in the way of supplying nurses, suitable invalid food, and appliances necessary in the sick-room; and this is done irrespective of religious denomination—principally, too, on the recommendation of medical visitors. It has dispensed during the past year 5255 pints of beef-tea, 8460 pints of milk, 523 chop dinners, 342 fish dinners, and 1621 meat dinners. The number of persons nursed has been 1171; supply of night-nurses, 195. Most of the persons nursed have been out of work during the winter. In some cases the patients cheerfully contributed to the funds of the Society.

A MEDICAL MAN ATTACKED BY A HORSE.

Our papers give a circumstantial account of a savage attack on a medical man by a horse. Dr. Richards, assistant to Dr. W. Renton of Shotley Bridge, Durham, in attempting to mount his horse on leaving a patient's house, the animal resisted, and attacked him in a savage manner with its teeth. Dr. Richards struck it several blows with his stick, but, notwithstanding, the animal succeeded in thrusting him into an enclosed yard, where it again attacked him in a most vicious manner, tearing his clothes and fracturing his arm. A passer-by rushed at the horse with a heavy block of wood, and succeeded in beating it off. I am glad to hear that, with the exception of the fracture, Dr. Richards's injuries are not serious.

THE MEASLES EPIDEMIC IN THE NORTH.

The course of the epidemic of measles in Sunderland shows a steady waning, but has made progress in Newcastle. During the last month (May) the increase has been very marked in the latter town, while in Sunderland during the same time there has been more than a corresponding decline. Some of the large towns on the Tyne, such as Jarrow, as well as the smaller mining and manufacturing villages, have suffered very severely. Lately the weekly mortality of Sunderland from all causes has fallen to 18·6 per 1000.

LUNATICS IN HARTLEPOOL WORKHOUSE.

At the last meeting of the Hartlepool Board of Guardians, Mr. Cleaton, one of the Commissioners in Lunacy, sent in a report upon his recent visit to the workhouse. It set forth that there were eighteen imbecile and insane patients, nine of each sex; one admitted on April 23rd was in a strait waistcoat, and was suffering from acute insanity, and quite unfit to be under workhouse care. A woman suffering from acute mania, it was pointed out, was scarcely fit to be in a workhouse. Another case required constant watching. The accommodation for these classes was quite inadequate. The clothing, too, of the imbeciles was unsatisfactory. The Local Government Board also sent some extracts from the report of the Poor-law inspector complaining of the bedding of the female imbeciles. The clerk to the guardians had been directed to state in reply that there were now no more cases than the wards were certified to accommodate.

LUNACY APPOINTMENT.

The Lord Lieutenant of Ireland has appointed Dr. A. Finegan to succeed Dr. Norman as resident medical superintendent of the District Lunatic Asylum at Castlebar. Dr. Finegan is well known in the north of England, having been for some time assistant medical officer in the Northumberland County Asylum at Morpeth.

Newcastle-on-Tyne, June 10th.

EDINBURGH.

(*From our own Correspondent.*)

SPECIAL MEETING OF THE MEDICO-CHIRURGICAL SOCIETY.

A NEW departure in the meeting arrangements of this Society was made recently, when a special meeting was held for the exhibition of pathological specimens and the discussion of clinical cases of special interest. The meeting was largely attended, and the proceedings were of an unusually interesting nature. At the close, the President congratulated the Society upon the success of the experiment, and announced that a series of similar meetings will be held in future alternately with the ordinary meetings.

THE METHOD OF COMPRESSING THE SUBCLAVIAN ARTERY.

Dr. Joseph Bell exhibited the upper extremity of a patient in whose case amputation had been performed for extensive sarcomatous disease of the scapula. The hæmorrhage had been controlled by a method recommended to him by Professor Chiene, in which a curved steel skewer was passed from above downwards behind the subclavian trunks, and brought out in front through the pectoral muscles. Pressure was exerted on the vessels by an elastic tube applied as a figure-of-8 over the anterior part of the region transfixed, a firm pad intervening between the elastic tubing and the patient's skin. The method is similar to that used by the late Professor Spence in the case of the femoral artery in amputation at the hip-joint. In this case Dr. Bell found the method perfectly satisfactory, as the limb was removed with the loss of but two ounces of blood.

ULCERATIVE ENDOCARDITIS.

Dr. Byrom Bramwell showed a series of microscopic sections of various tissues from cases of acute ulcerative endocarditis, stained by Gram's method. In all there was a most admirable demonstration of the micrococci present in this disease. Dr. Bramwell mentioned that some cultivation and inoculation experiments made in connexion with these cases had yielded as yet no positive results; but that he had little doubt as to the infective nature of the disease.

PARIS.

(*From our Paris Correspondent.*)

THE INTERNATIONAL SANITARY CONFERENCE.

FROM a conversation I have had with an English physician who has just come from Rome, where he had been to take part in the proceedings of the International Sanitary Conference, I have learned, but not with astonishment, that the Conference may probably break up without having materially increased our knowledge of the nature and prophylaxis of cholera, as the majority of the foreign members seem to be antagonistic to their English colleagues, for almost every proposition that emanated from the latter was pooh-poohed or so little heeded that it has been a question whether the British representatives should not withdraw from the Conference. Some concession has, however, been made as to the futility of quarantines, whether on sea or on land. But what astounded the members present was the affirmation made by an English physician to the effect that cholera was not imported from India, but that each epidemic that has occurred in Europe originated from local causes. There is, however, nothing new in this theory, for it will be remembered that M. Jules Guérin has entertained it, though almost alone, for nearly half a century.

OLD SHOES AND CHOLERA.

A propos of cholera, the report of the Society of Hygiene of Milan draws attention to the influence of old shoes as a means of propagating the disease. When a person treads a soil more or less damp in a locality infected, there is every chance of his conveying the germs in the manner described.

PLANTS IN BEDROOMS.

It is generally supposed that the presence of plants in a bedroom is prejudicial to the health of its occupants. This, it appears, is an error, for at a recent meeting of the Congress of Pharmaciens one of the members stated that plants, far from being hurtful, on the contrary, in disengaging ozone from the vapour emanating from them, render the atmosphere of a room in a state of humidity perfectly healthy; moreover, it is averred that ozone, in destroying the microbes, and thus purifying the air, is favourable to persons affected with pulmonary consumption. Hence the Congress recommended that, while bedrooms may be furnished with plants which disengage the most ozone, flowers should be eliminated from them, as they do not possess the same virtues as the plants.

THE QUEEN'S BIRTHDAY.

Every year on the occasion of the Queen's birthday a grand dinner is given at the British Embassy. That for this year took place on Saturday last, when the principal members of the British Colony were present, the medical profession being represented by the Hon. Dr. Alan Herbert, Dr. Boggs, Dr. Loughman, Dr. Douglas Hogg, and Dr. Faure-Miller. Lord Lyons received his guests with his usual affability. His dinners are excellent, and his wines are reputed to be of the choicest kind and quality, yet his lordship never partakes of the latter. He is most abstemious, and appears to enjoy the best of health.

THE ILLNESS OF M. ANATOLE DE LA FORGE.

M. Anatole de la Forge, Vice-President of the Chamber of Deputies, who was one of those who were struck with insolation at the funeral of Victor Hugo, and was rather seriously affected, is now, I am glad to say, out of all danger. M. Anatole de la Forge is one of those rare Frenchmen who are teetotallers. He told me that he has never taken a glass of wine since he was a boy, drinks nothing but water, and has always enjoyed very good health. He is now sixty-five years of age.

At its last meeting, the Paris Faculty of Medicine decided that the prize founded by M. Lacaze, of the value of 11,400 francs, and which is given every two years, will next be awarded in 1886 to the author of the best work on Phthisis and Typhoid Fever.

Paris, June 9th.

EGYPT.

(*From a Correspondent.*)

The examinations at the medical school mentioned in my last letter were concluded on May 23rd. The whole number of students was 147, consisting of 126 students of medicine, 4 of pharmacy, and 17 of midwifery. Of the medical students, 84 passed and 41 were referred to their previous studies for a year, while one was ill during the examinations. There were 20 students of the fifth and final year, of whom 16 passed, and these 16 will now undergo a competitive examination to elect 5 of their number as house-surgeons at £72 a year, while the remaining 11 will become unpaid dressers, and work in the native hospital. In twelve months' time the whole 16 will be again examined in order to receive their certificates to practise. The whole of the 4 apothecaries and 17 pupil midwives were passed by the examiners. Each class was examined by its own native professor, aided by an independent examiner, of whom there were the following eleven:—Dr. Abbate Pasha (President), Dr. Grant Bey, Dr. Murison, Dr. Milton, Dr. Sandwith, Dr. Hess, Dr. Engel, Messrs. Hooker and Sickenberger for pharmacy, and two natives. This is the first year that students have been subjected to the test of written papers and clinical examination in addition to the stereotyped *vivâ voce* of a quarter of an hour, during which the candidate repeats from memory in the exact words of the text-book all that he knows of the disease in question. Thus it happens that a subject approached from an unaccustomed point of view, a cross-examination on his own glib quotations, or a question requiring reasoning intelligence on the part of the candidate, usually baffles him effectually. This is even more noticeable among the girl students than the boys. It is wonderful, however, how much young men may learn who study anatomy without dissecting, and even without seeing other preparations than those of wax, who are taught organic without the rudiments of inorganic chemistry, who do no practical ward work, and who are entirely dependent on professors, some of whom have little or no interest in, or aptitude for, the lessons they deliver. No great hope can be entertained of this school of medicine until the scholars are taught a European tongue, but the slight reforms which have taken place during the last twelve months are sufficient to encourage those in Cairo who are unselfishly striving for the school's welfare.

Cairo, May, 1885.

MEDICAL NOTES IN PARLIAMENT.

Inoculation against Cholera.

In the House of Commons, on the 8th inst., Dr. Cameron asked the President of the Local Government Board whether his attention had been called to the report of a Committee of the Academy of Medicine and Surgery of Barcelona appointed to investigate Dr. Ferrán's system of protected inoculation against cholera; whether he had observed that, according to Spanish telegrams published in the newspapers, the Spanish Government on May 28th appointed a commission to proceed to the cholera-stricken district of Valencia along with Dr. Ferrán, with the view of testing his system; and whether, in view of the probable fleeting nature of the opportunity now presented for an investigation, and the trifling expense required for the despatch of a small commission to an accessible country like Spain, he would consider the propriety of at once nominating such a commission without awaiting the result of protracted negotiations with the Indian Government as to their bearing a portion of the cost.—Mr. Russell replied that attention had been called to the report referred to, but that the Local Government Board did not deem it necessary at the present time to despatch a commission on behalf of the Board with the view of investigating Dr. Ferrán's system of inoculation.

ROYAL COLLEGE OF PHYSICIANS.

At an extraordinary Comitia held on Thursday last, a communication was received from the secretaries of the British Association for the Advancement of Science in reference to the establishment of an International Scientific Association, and, in proposing that a preliminary scientific conference be held in London in 1888, asking for the cooperation of the College in promoting that object. It was felt, however, that the matter would be better left in the hands of the British Association.

The report of the Committee on the Lunacy Bill was received and adopted; as was also the report from the Croonian Trust Committee.

ROYAL COLLEGE OF SURGEONS.

At an ordinary meeting of the Council of the Roya College of Surgeons of England held on Thursday last, unanimous resolution of condolence with Miss Arnott on th death of Mr. Moncrieff Arnott was passed. The nominatio of Hunterian Professors was proceeded with, Messrs. Treve Stewart, Brailey, and Alexander Hill being appointed. Th nomination of Professors of Surgery was postponed. Dr Wooldridge, of Guy's Hospital, was appointed Arris and Gale lecturer for the ensuing year. Mr. Bland Sutton, of the Middlesex Hospital, was appointed Erasmus Wilson lecturer

A letter from Mrs. Cæsar Hawkins was read, offering a marble bust of her late husband, to be placed in the College The bust was accepted, and the best thanks of the Counci were voted.

It was proposed that the College take 100 copies of the autotype reproduction of the original manuscripts of lectures given by Harvey in and after the year 1616, and which have recently been discovered in the British Museum after having been lost for above 100 years. This proposition was agreed to.

A communication was received from Dr. Hickman, forwarding a memorial signed by more than 600 teachers, practitioners, and students of medicine, urging that the Royal College of Physicians of London and the Royal College of Surgeons of England be amalgamated, forming a Royal College of Medicine; and that this College of Medicine be empowered to grant the degree or title of Doctor of Medicine, giving the power to practise in medicine, surgery, and midwifery. The memorial was referred to the joint committee on the title of Doctor.

Thanks were voted to Mr. Marshall for the report of the General Medical Council which was received from him.

A letter was received from Dr. Hack Tuke, calling attention to the in many respects objectionable clauses 12 and 13 of the Lunacy Act Amendment Bill now before the House of Lords, and suggesting that a protest should proceed from the Council.

On the 8th of May, 1884, a resolution was adopted by the Council, that a meeting of the Fellows and Members be called every year, to which a report from the Council be presented; it was now resolved that a meeting be held in October, of which due notice shall be given, and at which the report of the Council be presented. A letter from the Association of Members, containing resolutions passed at their last meeting, was presented.

A communication from the secretaries of the British

Association for the Advancement of Science was received, asking the opinion of the Council as to the advisability of holding a Preliminary Scientific Congress in London in 1888, and also whether the Council would give facilities for the holding of meetings. The Council replied that it was not called upon to give an opinion as to the advisability of holding such congress considering its present information, but would be prepared to offer what facilities it could for promoting its success.

Obituary.

SIR WILLIAM MURE MUIR, M.D., K.C.B.

SIR WILLIAM MUIR, the late Director-General of the Army Medical Department, died on the 2nd inst., after a long illness. In the autumn of 1877 he first exhibited symptoms of the disease which ultimately killed him. At that time his life was in jeopardy from the effects of very severe intestinal hæmorrhage and hæmatemesis. He rallied, returned to his duty, and discharged it manfully to the end of his Director-Generalship in May, 1882. But the manifestations of abdominal disease in 1877 were but the indications of the beginning of the end, and Sir William Muir's most attached friends could not have wished to have seen his life prolonged after so lingering and protracted an illness. He had suffered at different times during his tropical service from the effects of climatic disease.

Sir William Mure Muir, K.C.B., late Director-General, Army Medical Department, received his professional education at the University of Edinburgh and at St. George's Hospital, London. He obtained the degree of M.D. Edinburgh University, and the diploma of the College of Surgeons, Edinburgh, in 1840.

Dr. Muir entered the service as an assistant surgeon on Nov. 22nd, 1842, and finally became Director-General in April, 1874. He served upon full pay for nearly forty years, of which twenty-four were passed upon foreign service, in the Mediterranean, Turkey, and Crimea, Mauritius, Bombay, Madras, China, North America, and Bengal. He landed with his regiment, the 33rd, at Old Fort, and continued in charge of it throughout the siege of Sebastopol, having been present at the Alma, Inkerman, sortie of Oct. 26th, and at the attacks on the Redan, and siege and fall of Sebastopol (medal and three clasps, Knight of the Legion of Honour and Turkish medal). In February, 1885, and again in September, he was specially recommended by Mr. Alexander, the principal medical officer of the Light Division, for promotion on account of the zealous and careful manner in which he performed his duty, both in Bulgaria during the ravages of cholera, and in the Crimea. With the exception of a few days' sickness on his first landing at Eupatoria, he never quitted his post. He was also recommended for advancement by Generals Simpson and Codrington. Dr. Muir subsequently proceeded with his regiment to Mauritius, and thence to Bombay, and served in the Indian Mutiny in 1857-58. He was selected as principal medical officer of the Expeditionary Force to China under Sir Hope Grant in 1860, and was mentioned in despatches (medal with two clasps and C.B.); and for the able manner in which he had conducted the medical duties of the Expedition he was specially promoted to the rank of Inspector-General.

In 1861 Dr. Muir was nominated to accompany the Expedition to North America in the *Trent* affair, and marched with the troops through Nova Scotia. He remained in North America upwards of five years. During the active operations of 1862-63 in the United States he paid several visits, as an amateur, to the army of the Potomac, and on May 14th, 1865, he proceeded, at the request of the British Government, to Washington, in view of reporting on the sanitary and field medical arrangements of the army. He visited all the principal hospitals, and the hospitals of the Confederate Army at Richmond, &c., and embodied the results in a very valuable report. He had the highest opinion of the American nation, of their energy, force of character, and fertility of resource, and always looked back upon his experience and upon the friendships he contracted in that country with the liveliest satisfaction.

In 1868 he became principal medical officer of Her Majesty's British troops in Bengal, where he remained for upwards of four years, and was then selected as head of the Sanitary Branch of the Army Medical Department, London.

On the retirement of Sir Galbraith Logan, Sir William Muir was promoted to the post of Director-General for a term of seven years, from April 1st, 1874, which period was specially extended to May 6th, 1882.

On Dr. Muir's relinquishing his post in India for that of head of the sanitary branch of the War Office in this country, the Government of India expressed in very warm terms their appreciation of his services, and of the important assistance the Government had derived from his experience, advice, and practical suggestions. Lord Napier of Magdala also recorded his opinion of the very valuable character of Dr. Muir's services, and of the independence, honesty, and sound judgment he had always exhibited.

In 1868 Dr. Muir became honorary physician to the Queen, and in 1873 he was made a K.C.B., and awarded a good service pension in 1880.

There are two ways of speaking of the dead. One is the principle of "De mortuis nil nisi bonum;" the other and truer

> "Speak of me as I am; nothing extenuate,
> Nor set down aught in malice."

Sir William Muir would himself have shrunk from all exaggerated estimates of his ability and services. What was he, then? What did he seem to be to those who knew him well and who were honoured with his confidence and friendship? He was one of Nature's noblemen: he had an eminently handsome head, finely chiselled features expressive of intelligence and strength; he was large of heart and intellect, and there was nothing mean about him; he had great courage, independence of character, and directness of aim: he was not, like Admirable Byng, for example, a man of personal courage, but, where responsibility was concerned, calling for a council of war. With Sir William Muir the boldest was often the best policy, because it was the boldest. Once having pictured to himself the object to be attained, he never faltered. Through good report or evil report (and it was for years the latter) it was all the same; he could labour and wait, for he had that strength which comes partly of moral robustness of character, partly of intellectual conviction—qualities which characterised statesmen of a past age. United with this power, this self-reliance, there were great gentleness and naturalness, and these formed that personal charm which first attracted and then welded his friends to him. Of course he made enemies: no man of character and independence can do otherwise; but those who knew him best believed in him most. He did what he thought right, and no doubt estranged some of his friends by doing it; but he gave the public medical service the power of growth and development by an unflinching persistence in his policy. Most, if not all, have come to recognise that the usefulness of the Department has enormously increased with its increase of power. The indebtedness of the medical service to Sir William Muir is undoubted, and at his last public appearance at a departmental dinner he was evidently overcome by emotion at the ovation he received. No one could have held a more enviable position as a regimental officer than did the late Director-General in the earlier stages of his career. When he left the 42nd Highlanders, the commanding officer told him, to prevent disappointment, that he could not expect in another corps to have the same amount of influence; but in the 33rd Regiment he gradually won the respect and esteem of all, and his influence for good was universally acknowledged. Still, he always recognised that responsibility and power must go hand-in-hand, and he regarded the position of the medical service under the regimental system as inherently defective. What is best for the public service as a whole, he was never tired of proclaiming, is best for the medical service, and the only tenable ground for it to occupy. In everything appertaining to the sick and wounded soldier, to the hospital service and its administration, and to army hygiene, the medical officer should be supreme; and within the limits which were clearly defined and circumscribed by his sphere of duty, the medical officer should be endowed with authority in the interest of the soldier and the State. His experience had taught him that of all men the medical officer had the greatest sympathy with the private soldier; and that, next to the general in command, the principal medical officer of a force in the field had the greatest responsibility, but lacked the power to get his requirements fulfilled. What had been begun by his predecessors in the direction of the department was consolidated and completed under his *régime*. He gave the medical service an autonomy. The Warrant of 1879, under the terms of which all army medical officers are serving at the present time, was unquestionably an enormous stride in advance of anything that had gone before it. If Sir William Muir erred, it was in favour of military efficiency, and in view of securing military success. Impressed with what he had seen of war on a vast scale in America and elsewhere, he had learnt the paramount importance of disencumbering a marching and fighting force of its sick and wounded and all unnecessary impedimenta, so as to leave the general free to make a rapid movement and inflict a prompt and decisive blow whenever and wherever this could be effected. By an irony of fate not at all uncommon in the world, the system was condemned by those in whose interest it was mainly designed. Still, he was right. When war comes upon this nation in earnest, and upon a scale compared with which our small campaigns will sink into insignificance, it will be seen that the provisions for such a war cannot keep pace with the requirements of a luxurious and selfish age.

Sir William Muir never lost sight of the true dignity of his calling; and, like all high-minded men, regarded the artificial glare reflected from military rank, dress, or titular distinction as nothing compared with the true light reflected from the scientific attainments of the members of a benevolent and dignified profession. Whatever may be the hankering of some after these things, progress and respect can only come from advancing knowledge and usefulness. All the public medical services have a common cause and a common calling, and are but a part of the great medical profession, the members of which have only to be true to themselves. Time will do the rest. What the late Sir William Muir accomplished will be regarded more and more highly as time goes on, because his work will go on developing, and the wounded in the field, the sick in our war hospitals, and those who have charge of them, will reap the benefit of his labours even after his name is forgotten.

JAMES MONCRIEFF ARNOTT, F.R.C.S., F.R.S.

Mr. James Moncrieff Arnott, whose death recently occurred at his residence in Sussex-gardens, Hyde-park, was born at Chapel, Fifeshire, in 1794. He was educated at the High School and University of Edinburgh, in this latter institution commencing those professional studies which he subsequently continued in London, Vienna, and Paris. Mr. Arnott was one of the founders of the medical school of the Middlesex Hospital fifty years ago, along with Sir Charles Bell, Dr. Copland, Dr. Leighton, Dr. (afterwards Sir Thomas) Watson, and others, and for many years acted as surgeon to the Middlesex Hospital and North London Hospital. He was afterwards successively selected to occupy the chairs of Surgery in King's College and University College. In 1840 Mr. Arnott was nominated one of the Council of the Royal College of Surgeons; he was elected a Fellow in 1843, and later on became a member of the Court of Examiners of that body, of which he had twice been elected to the presidency. In 1860 he was elected representative of the College in the General Council of Medical Education and Registration of the United Kingdom. Mr. Arnott held the appointment of surgeon in ordinary to the late Prince Consort. The subject of our notice was in every sense of the word a truly great man, conscious of his abilities to assume the highest responsibilities of his profession, and most conscientiously discharging those duties when undertaken. He belonged to the epoch of British surgery when the old traditions were being sent to the winds, and is best remembered in actual surgical work as having successfully performed a then difficult plastic operation for ruptured perineum. His writings consisted chiefly of contributions to the Transactions of the Royal Medical and Chirurgical Society.

JOSEPH BUNNY, M.D.

By the death, on the 30th ult., of Dr. Joseph Bunny, Newbury has lost one of its oldest and most respected inhabitants. He received his medical education at Edinburgh, Guy's, and St. Thomas's, and in 1823 obtained the degree of M.D. at the University of Edinburgh, having previously, in 1820, become a Member of the Royal College of Surgeons of England, and a Licentiate of the Society of Apothecaries. He commenced the practice of his profession in Newbury, and in 1839 was elected borough coroner, an office which he held until 1873, when he resigned. Dr. Bunny was a Fellow of the Obstetrical and Medical Societies of London, a magistrate for the borough, and held several other offices connected with local charities. He was the first hon. surgeon to the Newbury Dispensary, established in 1835, and performed the duties for ten years, after which he was hon. consulting surgeon until the year 1877. For some years past his health had been such as to gradually induce him to seek release from his practice and to take a less active part in public matters. The deceased had attained the age of eighty-six years.

Medical News.

Royal College of Surgeons of England.—The following Members, having passed the Final Examination for the Fellowship on May 28th, 29th, and 30th, and June 1st, were at a meeting of the Council on the 11th inst. admitted Fellows of the College:—

Barlow, John, Elmbank-crescent, Glasgow; Diploma of Membership dated Nov, 17th. 1874.
Penny, William J., Caledonia-place, Clifton, Bristol; Nov. 19th, 1879.
Galpin, George Luck, Great Marlborough-street; Nov. 18th, 1880.
Pedley, Frederick Newland, Finsbury-square; April 21st, 1881.
Bass, Frederick, Union-road, Jan. 18th, 1882.
Collier, Joseph, Manchester; July 17th, 1882.
Thring, Edward Thomas, Torrington-square; July 20th, 1882.
Voss, Francis Henry Vivian, Clapton-square; July 31st, 1882.
Worthington, Sidney, Pattensweir, Enfield; Nov. 16th, 1882.
Saneyoshi, Yashuzumi, St. Thomas's Hospital; Jan. 24th, 1883.
Pigeon, Henry Walter, Royal Infirmary, Manchester; Jan. 25th, 1883.
Wynter, Walter Essex, Templecombe, Twickenham; Jan. 26th, 1883.
Vogan, James Norman, Hatchlands, Redhill; April 18th, 1883.
Paget, Stephen, Grosvenor-street; July 23rd, 1883.
Steedman, J. Francis, High Ercall Hall, Wellington; Nov. 13th, 1883.
Muspratt, Charles Drummond, Nightingale-lane; July 30th, 1884.

Three other candidates passed the examination, but two not having attained the legal age (twenty-five), and one not possessing a medical qualification, will receive their diplomas at future meetings of the Council when qualified. Seven candidates failed to reach the required standard, and were referred to their professional studies for one year.

Mr. Edward Albert Schäfer, M.R.C.S., F.R.S., will commence a course of three lectures on "Secretion" on Monday, the 15th inst., at 4 o'clock.

Society of Apothecaries.—The following gentleman passed his examination in the Science and Practice of Medicine, and received a certificate to practise, on the *4th inst.*:—

Shaw, Wm. Wright, M.R.C.S., St. Bartholomew's Hospital.

The following gentlemen also on the same day passed the Primary Professional Examination:—

William Gilmore Ellis and Percy John Rendall, St. Bartholomew's Hospital; John Elliotson Pennington Sparrow, King's College.

The Hull General Infirmary has received a bequest of £10,000.

The second annual dinner of the Association of Public Sanitary Inspectors was held on the 6th inst.

Dr. Lewis A. Stimson has been elected Professor of Anatomy in the University of the city of New York, to succeed the late Professor Darling.

The epidemic of small-pox at Burslem is reported to be spreading; nearly forty persons are suffering from the disease, and several deaths have occurred.

According to the *Calcutta Englishman*, Dr. Fraser has been shot in Borneo during an attack made by natives upon the expedition of which he was a member.

Superannuation Allowance.—Mr. G. Macdonogh, late medical officer for the Clapham district, has received a superannuation allowance of £80 a year.

At the College of Surgeons on Tuesday evening last, a private conversazione was given by the President, Mr. Cooper Forster. About 1200 guests were present.

Vaccination Officers Association.—At the next meeting of members of this Association, to be held on June 20th, at 2.30 P.M., at the Charing-cross Hospital Medical School, Chandos-street, Dr. Robert Cory will read a paper on "Some Medical Facts relating to Vaccination, of which it is desirable Vaccination Officers should have more extended Knowledge." Remarks will also be made on "Duties devolving on Vaccination Officers during Epidemics of Small-pox."

ROYAL SOCIETY.—Sir Andrew Clark, M.D., Henry Hicks, M.D., Arthur Milnes Marshall, M.D., and Professor Sydney Ringer have been elected Fellows of the Royal Society.

SIR WATKIN WILLIAMS WYNN, Bart., M.P., has expressed his intention of erecting a cottage hospital at Ruabon, North Wales, to the memory of his uncle, the late baronet.

THE French Association for the Advancement of the Sciences will hold its fourteenth session at Grenoble from the 13th to the 20th of August, under the presidency of M. Verneuil.

ST. ANDREWS GRADUATES' ASSOCIATION. — The members of this Association will hold a conversazione on Wednesday evening next at the rooms in Chandos-street, Cavendish-square.

MIDDLESEX HOSPITAL STUDENTS' SOCIETY. — The members of this Society will hold a conversazione on the 25th inst., when Dr. B. W. Richardson, F.R.S., has consented to deliver an address on "Medical Poets."

THE VOLUNTEER MEDICAL STAFF CORPS.—By the permission of the Lord Mayor, a meeting will take place at the Mansion House on June 19th, at 3 P.M., with the object of furthering the interests of the Volunteer Medical Staff Corps.

HYDROPHOBIA.—On the 8th inst. two cases of hydrophobia were reported in Manchester, a man and woman having died of the disease at the infirmary. On the 7th inst. in Dublin twenty-one persons were bitten by two rabid dogs.

HANDEL BICENTENARY FESTIVAL.—This festival will be held at the Crystal Palace on the 19th, 22nd, 24th, and 26th inst. The rehearsal takes place on the first day, a performance of "The Messiah" on the second, selections on the third, and "Israel in Egypt" on the fourth.

UNIVERSITY OF OXFORD.—At a congregation held on the 4th inst. the degree of M.D. was conferred on E. Daly (University) and E. Jenkins (Trinity). Convocation has passed a decree conferring the degree of M.A. upon Arthur Thompson, M.R.C.S., Lecturer in Human Anatomy in the University Museum.

SANITARY INSTITUTE OF GREAT BRITAIN.—At an examination held on June 4th and 5th, twenty-five candidates presented themselves, nine as local surveyors and sixteen as inspectors. Certificates of competency were awarded to three candidates of the former class and to fourteen of the latter.

THE thirtieth annual festival of the Poplar Hospital for Accidents was held on the 10th inst., when it was stated that the number of in-patients admitted to the hospital during the past year was 612, the number of out-patients treated being 7289. During the evening subscriptions amounting to £1450 were announced.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—A meeting of this Society was held on Tuesday last at the rooms of the Medical Society, the President, Dr. Norman Kerr, in the chair. A paper was read by Dr. J. Muir Howie (Liverpool) on "The Treatment of Inebriety." The physical aspect of the disease in dipsomania was specially treated of. A discussion followed, in which Sir Edwin Saunders, Dr. Bridgwater, Dr. Longhurst, Mr. F. J. Gray, and Mr. H. R. Kerr took part.

AT the St. Pancras Coroner's Court on the 8th inst., inquests were held on the bodies of four persons, and at the close of the inquiries the foreman of the jury entered a protest on behalf of himself and fellow-jurors against the disgraceful mortuary accommodation, or rather want of accommodation, in St. Pancras. A rider was appended to each of the verdicts, declaring that the present dangerous and unhealthy state of the mortuary, and the want of proper accommodation for the holding of inquests, showed that the St. Pancras Vestry had no consideration for the living and a total disregard of the dead.

THE ROYAL ACADEMY OF MEDICINE OF BELGIUM.—The following subjects have been selected for theses, and to the writer of the most meritorious essay on each a prize will be presented by this institution:—1. The determination by experiments and applications the degree to which spectral analysis may be realised in the researches of forensic medicine and the medical police. 2. The experimental determination of the influence which desiccation exerts when employed as a means of conserving the simple vegetable medicaments. 3. The physiological effect of sanguineous depletion, either local or general; its indications and contraindications in the treatment of disease. 4. Description and critical review of the different methods of surgical dressing and of the antiseptic treatment of wounds and surgical affections. 5. The study of erysipelas, *charbonneux* or *rouget*, of swine, as relating to its causes, manifestations, lesions, prophylaxis, and treatment, and to establishing eventually its relations with carbuncular or bacterian diseases.

CITY-ROAD CHEST HOSPITAL.—On the 5th inst. a meeting was held at the Mansion House in aid of the fund for completing the new wing now being added to this institution. Last year as many as 7439 patients were admitted, and the numbers are constantly increasing. The special feature of the hospital is that beds are kept for the reception of persons presenting themselves for relief as out-patients who are suffering from acute and dangerous diseases of the chest of recent origin, and who cannot be properly treated unless immediately received as in-patients. The total income last year was £4424. For completing the extension the sum of £5000 is still needed.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.—The following office-bearers have been elected for the ensuing year:—Committee: the Presidents of the Colleges of Physicians and Surgeons, E. Adrien, L. Atthill, J. T. Banks, J. Hawtrey Benson, E. Bennett, D. Brady, E. Brunker, Henry G. Croly, B. G. Darley, J. Denham, G. F. Duffey, J. F. Duncan, T. Fitzpatrick, S. Gordon, T. Grimshaw, J. Harvey, A. H. Jacob, H. Kennedy, G. H. Kidd, J. Little, J. M'Donnell, R. M'Donnell, W. J. Martin, E. D. Mapother, A. H. Marks, William Moore, G. Morrogh, J. F. Pollock, Sir G. H. Porter, P. C. Smyly, W. Stokes, R. Tagert, J. Tufnell, J. H. Wharton. Trustees: J. F. Duncan, John M'Donnell, J. H. Wharton. Hon. Treasurer: W. Thomson. Hon. Secretaries: J. M. Finny and J. W. Moore. Hon. Secretary for India and the Colonies: Henry King. Acting Secretary: A. H. Benson.

THE LOWER THAMES VALLEY MAIN SEWERAGE BILL. By the new Bill, which dissolves the Lower Thames Valley Main Sewerage Board and constitutes a new united district for the disposal of the sewage of the Lower Thames Valley Main Sewerage District, it is proposed that the district of the Joint Board shall be subdivided, so that Richmond and the parishes constituting the Richmond Rural Sanitary Authority (Richmond Union, Barnes, Kew, Mortlake, and Petersham) shall be combined as one district; that Kingston-Surbiton District and the district of New Malden shall be constituted as another authority under the name of the Kingston District; and that the Local Government Districts of East Molesey, Hampton Wick, Ham-common, and Teddington, and the Kingston Union, shall be formed into a third district. Power is given to each of the newly constituted authorities to make due provision for the disposal of the sewage of its district, failure to make such provision within two years from the passing of the Act to render the authority liable to be declared in default.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BANHAM, HENRY FRENCH, M.A., M.D.Cantab., L.S.A.Lond., has been appointed Senior Physician to the Royal Berkshire Hospital, vice Wells, deceased.

BLUMER, F. MILNES, B.A.Dunelm., M.B., C.M.Ed., has been appointed House-Surgeon to the Staffordshire General Infirmary, vice William Edward Rawson, M.R.C.S., resigned.

BURRIDGE, JOHN WALTER, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Eastham District of the Wirral Union, vice Wykes.

CANNY, DENIS JOSEPH, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer and Public Vaccinator for the District [illegible] th Wales.

CH[illegible] M.D., C.M.Ed., M.R.C.S., has been appointed [illegible] for the Woolton District of the Prescot Union, vice Wood.

COLLINS, JOHN SHRILL, M.D.Q.U.I., M.R.C.S., has been appointed Assistant House-Surgeon to the Hull Royal Infirmary, vice H. C. Chambers, L.R.C.P., M.R.C.S., resigned.

Davis, Henry, M.R.C.S., L.S.A.Lond., has been appointed Second Chloroformist to the Middlesex Hospital.

Embrey, Mr. George, has been appointed Public Analyst for the County of Gloucester.

Harrison, J. W., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Sandwich and Ash Districts, vice Horne.

Houseman, James Gilpin, M.B., has been appointed Honorary Physician to the Newcastle-on-Tyne Sick Children's Hospital, vice David Drummond, M.D., resigned.

Jack, Robert Nilson, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Health Officer for Stawell, Victoria.

Kerr, Elias Wm., M.B., M.Ch.T.C.D., has been appointed Medical Officer for the Eastern District and the Workhouse of the Cerne Union, vice McEnery.

Lacey, Thomas Samuel, L.R.C.S.I. & L.M., L.R.C.P.Ed., has been appointed Medical Officer for the Royton and Thornham District of the Oldham Union.

Macdonald, Hugh, M.D., M.Ch.Glas., has been appointed Government Health Officer and Surgeon to the Gaol, Lyttleton, New Zealand.

Morrison, W., M.A., M.D. & C.M.Glas., has been appointed Resident Surgeon to Ballarat District Hospital, Victoria, Australia.

Smith, Henry Strode, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Eighth District of the Axbridge Union, vice Tarleton.

Watson, Thomas Alfred, M.B., C.M.Ed., has been appointed Assistant House-Surgeon to the South Dispensary, Liverpool.

Births, Marriages, and Deaths.

BIRTHS.

Barber.—On the 4th inst., at Clapham, S.W., the wife of H. Vaughan Barber, M.A., L.R.C.P.Lond., of Stuart-road, High Wycombe, of a daughter.

Bott.—On the 3rd inst., at Brentford, the wife of Henry Bott, L.R.C.P., of a son.

Brown.—On the 1st inst., at Ainslie-place, Edinburgh, the wife of J. Graham Brown, M.D., F.R.C.P.E., of a son.

Cane.—On the 3rd inst., at The Mansion House, Peterborough, the wife of Leonard Cane, M.D., B.S., of a son.

Chipperfield.—On the 6th inst., at Bloxham, Oxon., the wife of T. J. B. Pearse Chipperfield, L.R.C.P., M.R.C.S. (prematurely), of twin sons.

Creed.—On the 31st ult., at Rathkeale House, Girdler's-road, West Kensington-park, the wife of Charles Philip Creed, M.R.C.S., L.R.C.P.Ed., of a son.

Douglas.—On the 30th ult., at New-walk, Leicester, the wife of Claude Douglas, M.R.C.S., *of a daughter.*

Fraser.—On the 4th inst., at Western Lodge, Romford, Essex, the wife of James Alexander Fraser, M.R.C.S., L.R.C.P., of a daughter.

Lord.—On the 1st inst., at Wilton House, Landport-terrace, Southsea, the wife of Frederick Lord, L.R.C.P., L.R.C.S.Ed., of a daughter.

Ross.—On the 3rd inst., at Macquarie-street, Sydney, New South Wales, the wife of E. Fairfax Ross, M.D., of a son.

Sankey.—On the 1st inst., at Boreatton-park, Salop, the wife of Arthur O. Sankey, of a son.

MARRIAGES.

Down—Jones.—On the 4th inst., at St. John's, Chelsea, Hubert Vincent, second son of George Down, M.D., of Holmhurst, St. John's-hill, S.W., late of South Kensington and Montague-place, W.C., to Margaret, only daughter of the late Benjamin Jones, Esq., of Britannia-road, Fulham.

Evans—Wright.—On the 3rd inst., at S. Mary's, Lower Merton, Surrey, by the Rev. J. C. Erck, Frederick William, M.D., M.R.C.S., &c., eldest surviving son of the late Alderman Thomas Evans, of Cardiff, Surgeon, to Henrietta Clarissa, youngest daughter of the late Richard Wright, Esq.

***Phillips—Goetz.**—On the 3rd inst., at All Saints', Margaret-street,* John Phillips, B.A., M.D. (Cantab.), M.R.C.P., of Harley-street, eldest son of the late L. Phillips, of Birchmoor, near Bedford, to Jessie, eldest daughter of the late E. L. Goetz, of Gloucester-gardens, Hyde-park.

Stables—Drury.—On the 2nd inst., at Rathgar, Dublin, Walter Williams Godfrey Stables, M.R.C.S., of Heckington, Lincolnshire, eldest son of the late Walter Williams Stables, of Crosland Hall, Huddersfield, Jun., Esq., to Isabella Mary, youngest daughter of the late Thomas Drury, of Dartry, Upper Rathmines, County Dublin, J.P.

Walker—Lester.—On the 9th inst., at St. Matthias, Earl's-court, S.W., by the Rev. Henry Westall, of St. Cuthbert's, South Kensington, Charles Edward Walker, M.B., M.R.C.S., of Hurworth-on-Tees, Darlington, second son of W. H. Walker, M.D., Aldbro', Darlington, to Annette Curtis, youngest daughter of the late Rev. J. W. Lester, D.D., Vicar of Lower Norwood, Surrey. No cards.

DEATHS.

Fisher.—On the 7th inst., suddenly, at Haselly Manor, near Warwick, Thomas Fisher, M.D., of Stone House, near Wigan, aged 81.

Ling.—On the 1st inst., at The Beeches, Saxmundham, Suffolk, John Mitford Ling, M.R.C.S., L.S.A.Lond., aged 75.

Livingston.—On the 10th inst., suddenly, at his residence, High Barnet, John Livingston, M.D., aged 45.

Stuart.—On the 1st ult., at Fraserburg, Cape of Good Hope, of typhoid fever, Donald Stuart, M.B., C.M.Aberd., late of Kenmay, Aberdeenshire, N.B., aged 31 years and 11 months. Deeply regretted.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

The Lancet Office, June 11th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 a.m.
June 5	29·82	S.W.	75	65	123	83	65	...	Hazy
„ 6	30·00	W.	60	60	109	73	59	·29	Raining
„ 7	29·82	S.W.	62	59	121	75	58	·24	Cloudy
„ 8	29·73	N.E.	60	60	...	63	69	·17	Raining
„ 9	29·97	N.	52	52	85	63	53	·74	Raining
„ 10	30·35	E.	56	51	105	64	51	·03	Cloudy
„ 11	30·39	E.	54	47	98	64	45	...	Bright

Medical Diary for the ensuing Week.

Monday, June 15.

Royal London Ophthalmic Hospital, Moorfields.—Operations, *10.30 a.m., and each day at the same hour.*

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 p.m., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 p.m., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 p.m., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 p.m.

Royal Orthopædic Hospital.—Operations, 2 p.m.

Royal College of Surgeons of England.—4 p.m. Mr. A. E. Schafer: *Secretion.*

Tuesday, June 16.

Guy's Hospital.—Operations, 1.30 p.m., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 p.m.

St. Thomas's Hospital.—Ophthalmic Operations, 4 p.m.; Friday, 2 p.m.

Cancer Hospital, Brompton.—Operations, 2.30 p.m.; Saturday, 2.30 p.m.

Westminster Hospital.—Operations, 2 p.m.

West London Hospital.—Operations, 2.30 p.m.

Central London Ophthalmic Hospital.—Operations, 2 p.m., and on Friday at the same hour.

Wednesday, June 17.

National Orthopædic Hospital.—Operations, 10 a.m.

Middlesex Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 p.m.

St. Mary's Hospital.—Operations, 1.30 p.m. Skin Department: 9.30 a.m., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 p.m., and on Saturday at the same hour.

London Hospital.—Operations, 2 p.m., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 p.m.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 p.m.

University College Hospital.—Operations, 2 p.m.; Saturday, 2 p.m. Skin Department: 1.45 p.m.; Saturday, 9.15 a.m.

Royal Free Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 3 to 4 p.m.

Royal College of Surgeons of England.—4 p.m. Mr. A. E. Schafer: Secretion.

Royal Meteorological Society.—7 p.m. Dr. William Marcet: Meteorological Observations made on a Trip up the Nile, February and March, 1885.—Dr. H. H. Hildebrandsson: The Mean Direction of Cirrus Clouds over Europe.—Dr. A. Woeikoff: On the Influence of Accumulations of Snow on Climate.—Mr. Charles Harding: Note on the Weather of January, 1881.—Lieut. Alexander Leeper: Results of Meteorological Observations made in the Solomon Group, 1882-84.—Mr. David Cunningham: Graphic Hygrometrical Table.

Thursday, June 18.

St. George's Hospital.—Operations, 1 p.m.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 p.m.

Charing-cross Hospital.—Operations, 2 p.m.

North-West London Hospital.—Operations, 2.30 p.m.

Friday, June 19.

St. George's Hospital.—Ophthalmic Operations, 1.30 p.m.

Royal South London Ophthalmic Hospital.—Operations, 2 p.m.

King's College Hospital.—Operations, 2 p.m.

Royal College of Surgeons of England.—4 p.m. Mr. A. E. Schafer: Secretion.

Saturday, June 20.

King's College Hospital.—Operations, 1 p.m.

Royal Free Hospital.—Operations, 2 p.m.

Middlesex Hospital.—Operations, 2 p.m.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

A DUTCH ACCOUNT OF HOTTENTOT PATHOLOGY.

A Dutch practitioner who has lived for twenty years in South Africa sends to an Amsterdam medical journal some particulars of native customs and beliefs. The uterus is supposed to have a great tendency after parturition to fly upwards, and consequently after the second stage of labour the funis is carefully tied to one of the woman's great toes, so as to prevent the placenta from slipping away, and as soon as the third stage is completed she is tightly bound with a cloth or a cord at the level of the umbilicus, for if not the restless uterus would ascend into the breast. After the birth of a stillborn child nothing can prevent the womb from betaking itself into different regions and then performing unpleasant and painful gyrations. The writer mentions an old native woman who came to him with a scirrhus of the mamma. She complained of occasional pain in the abdomen, but was not seriously concerned about it, for, said she, "I know what that is; it is the womb going round; have I not had a stillborn child? From that time there can be no rest for the womb; he [the womb] keeps springing round and round, not always, but at times, perhaps for three months, and then for a fortnight he is still. Sometimes he sits here [indicating the spleen]; sometimes here [touching the right breast]; sometimes he sits behind my shoulder-bone, and then he burns like a coal of fire." The uterus has to answer in the native mind for most of the ills to which female flesh is heir; has she a colic, sickness, or any abdominal trouble, it is always the old story—"the womb is going round." When listening to a gesticulating patient describing her malady and enunciating her diagnosis of the case, it is frequently somewhat difficult for a medical man to keep his countenance. It is utterly useless for him to attempt to reason with the woman or explain to her the absurdity of the position she has taken up. She will only doubt his skill, and scornfully reply: "Doctor must not say it is not so, for I know that it is." Amongst the natives the new-born babe is treated to a purifying draught of the father's freshly passed urine. The whites, some of whom are nearly as ignorant and superstitious as the natives, employ a quack "wonder-doctor" as a substitute.

Surgeon, V.A.—1. The regulations for the reserve forces provide for only two grades of medical officers of volunteers—acting surgeon and surgeon. If our correspondent has completed twelve years' service as surgeon, he might apply to the Secretary of State for War, through his commanding officer, for promotion to the rank of surgeon-major, as is granted to militia surgeons.—2. The relative rank of acting surgeon of volunteers is lieutenant, and that of surgeon is captain.

F. C. P.—He is referred to a general notice at the head of this column.

CARE OF EPILEPTICS.

To the Editor of THE LANCET.

SIR,—The parents of a lad subject to epileptic fits followed by uncontrollable outbursts of temper are most anxious to get him admitted into a home where he will be well cared for and medically treated, as he is getting beyond their control. Some of your numerous correspondents would confer a favour by affording such information as will [illegible].

I am, Sir, yours faithfully,

M. G. E.

[illegible]

DIPHTHERIA.

To the Editor of THE LANCET.

SIR,—May I ask through the medium of your columns for particulars [illegible] treatment for diphtheria. Perhaps [illegible] will be able to suggest a line of treatment more [illegible] results than any known to

Yours truly,

L.S.A.

MEDICAL MISSION WORK IN CHINA.

FROM the report for 1884 of the Hang Chow Medical Mission in connexion with the Church Missionary Society, it appears that the total number of out-patients attended during the year was 2929, and of in-patients 203, patients visited at their homes bringing up the total of those who were relieved by the mission to 4707. Anæmia, as in the case of the Chin-Chew Hospital, the work of which was noticed in a recent issue, formed a large percentage of the cases coming under treatment. It is especially common amongst women, and is easily accounted for by the following causes: marrying too young, hæmorrhagic losses during confinement, suckling their children for three and four years, and their cramped feet, which prevent them taking proper and sufficient exercise. Diseases of the skin and digestive system and malarious fever also each contribute a large percentage of patients. A new hospital, comprising a refuge for opium smokers, which was its *raison d'être* when commenced some thirteen months ago, and a medical school are almost completed, and will, it is expected, be opened in a few months.

Dr. Whitelegge.—The statement is corrected in another column.

Mr. S. Johns.—The Preliminary is indispensable.

Mr. G. E. Walker.—Next week.

THE RISK OF SMALL-POX.

To the Editor of THE LANCET.

SIR,—The following two cases of small-pox have been selected from nearly fifty which occurred during an epidemic about thirty-five years ago in a parish in Essex comprising a population of about 1500.

Two cases presented themselves simultaneously in opposite parts of the parish. Having obtained authority from the Board of Guardians for a general revaccination, I lost as little time as possible in commencing my defensive operations. I began, of course, with the families connected with the patients; but, as in those days no lymph-bearing calves were in existence, and the Privy Council had not come forward as protectionists, some considerable time elapsed before obtaining a sufficient supply of lymph, which was then supplied either on points or glasses. That delay gave the enemy a considerable advantage, hence the large number of cases. In the course of about two months I had operated on more than 1000 persons, not a single one of whom was subsequently attacked by the disease, although I had no means whatever for isolation.

1. Thomas H—— occupied a cottage which formed part of a "row" in which occurred a case of confluent small-pox of a malignant character. I at once vaccinated and revaccinated every person in the row except T. H——, who could be neither persuaded nor compelled to submit to the operation, in which he "had no faith." I did, however, insist upon vaccinating every other member of the family, which was a large one. His neighbour died, and he, by way of daring, assisted at the funeral. Within ten days he required the like service from others, and he was the only one in the row attacked.

2. John H—— lived in a hamlet in which several cases occurred, about two miles from my residence. I at once put them under a state of siege by vaccinating every person except J. H——, whose avocation as an ash-gatherer took him much from home. I met him, however, several times, and he always declared his intention of "coming to be cut." Unfortunately for him and myself, he never did come. He, too, had a very severe attack. Early in the morning of the third day, whilst his wife was dozing after her night's vigil, he escaped in his nightshirt and ran to the village, two miles distant. The ground was covered with snow. When summoned I found him crouching in the corner of a coal-hole which he had been in the habit of emptying, shaking with cold and fear, and declaring that the bleeding was caused by people shooting at him. I procured for him some hot brandy-and-water, whilst a tumbril was being prepared with straw and blankets, in which I sent him home, having first provided a strait jacket, which I had shown a man in attendance how to apply when the patient had been placed in bed. Late that evening I was again summoned to the hamlet, as the patient had "broken loose." On my arrival I found two men holding him down. Discovering that the jacket had not been properly applied, I reversed it, and, having secured him to the bedstead, left him in the charge of the two men. After a month or so he was convalescent, and is now alive. His face is deeply pitted, but in no other respect is he the worse.

Now, when it is considered that all the above number of cases had been nursed by the wives or mothers, who had uninterrupted intercourse with their respective families; that they occupied cottages with no more than two bedrooms; and that after the first three weeks of the outbreak in no single instance did more than one case exist in a house—when all these circumstances are considered, I do affirm that should any person still doubt that vaccination is a sure and certain protection against small-pox, such person is entitled to no sympathy should he ever suffer the penalty which his blindness or obstinacy is sooner or later likely to inflict upon him.—Your obedient servant,

London, May 12th, 1885. WILLIAM B. OWEN.

A PLAGUE OF FLIES.

To the Editor of THE LANCET.

SIR,—Can any of your readers suggest the best method of ridding a house of flies? At the house I live in they are a regular pest, swarming in thousands.

I am, Sir, yours faithfully,

June 11th, 1885. VEXATUS.

SMOKING IN ASTHMA.

IN Henry Taylor's autobiography (Longmans, 1885, vol. ii., p. 153) occurs the following passage:—"The spasmodic form of disease has never returned. The cigarette which brought it to such a sudden end was made of a mild tobacco in paper slightly impregnated with saltpetre; not so manufactured with any medicinal view, but merely to make it burn better. It happened to be at hand when I was advised to try smoking tobacco; and it was this particular combination which saved me, for neither saltpetre nor tobacco pure and simple, or in other proportions, was of much use."

Mr. J. C. Richardson.—There can be no doubt that a medical man called to assist a midwife is entitled to a fee independent of the midwife's fee.

DOES COCAINE AFFECT DEEP-SEATED PARTS?

To the Editor of THE LANCET.

SIR,—In reply to Mr. Jackman's queries in your last issue I think that if a solution of cocaine of sufficient strength be applied for a long enough time, it will be found that the sensibility of the iris is reduced to zero. As I pointed out in a former communication, when solutions of atropine, eserine, or cocaine are applied to the surface of the conjunctiva, they percolate through the cornea, and come into actual contact with the iris, and the extent of their influence upon that membrane depends upon the strength of the solution, the frequency of the instillation, and the time that has been allowed to elapse from the date of the first application; thus the aqueous humour of a cocainised eye will produce anæsthesia of its fellow if applied to it. In one case in which I tried this experiment I was surprised to find the pupil contract under the influence of aqueous humour, which, so far as I knew, contained only a mydriatic—a circumstance that was explained by the fact, subsequently ascertained, that the patient had been using a solution of eserine prescribed elsewhere. There is undoubtedly a considerable difference in patients; in fact, I had one who behaved exactly in the manner described by your correspondent; but my experience after forty-one extractions for cataract under cocaine, and numerous other operations, is that the effect, on the whole, even so far as the iris is concerned, is very satisfactory. I questioned a patient on this point on whom I performed iridectomy. I said, "Did you feel any pain?" His reply was, "Well, not to say pain." "Did you feel anything?" "Well, I felt you were doing something, but the eye was numb." In very nervous patients it is well to apply the solution after section of the cornea, and to wait a few minutes before excising the iris; this brings the anæsthetic as thoroughly into contact with the iris as with the cornea, and there can be no doubt as to the result; or the iris may be excised with the knife in passing it across the chamber, a method I frequently practised before the introduction of cocaine when operating for cataract, as I constantly did without any general anæsthetic. I did not, however, find it necessary to do this, or to apply the cocaine after incising the cornea, when I operated upon Mr. Copeland. The solution employed in that case was one of 6 per cent., instilled every five minutes for half an hour.

I am, Sir, your obedient servant,

CHARLES BELL TAYLOR, M.D., F.R.C.S.,
Surgeon to the Nottingham and Midland Eye Infirmary.

June 8th, 1885.

R. D. H.—There would seem to be no course open to our correspondent but to put pressure on the Local Government Board.

Mr. H. W. Freeman's paper is marked for insertion.

Mr. L. Wies.—We do not prescribe.

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The Cavendish Lecture

ON

HYSTERIA AND ITS COUNTERFEIT PRESENTMENTS.

Delivered before the West London Medico-Chirurgical Society, on Friday, June 5th, 1885,

BY J. S. BRISTOWE, M.D., LL.D., F.R.S.

(Concluded from p. 1072.)

I PASS on to another group of cases. Hettie R——, a girl, fourteen years of age, came under my care about three years ago. Shortly before that she lost her father, and her brother died in a fit. These losses affected her deeply, and she was attacked with violent spasmodic jerkings of the muscles of the right arm and leg, and of the same side of the body, and with right hemianæsthesia. She remained in the hospital for some few weeks, and left it well, having been cured (it was thought) by the daily application of the faradic current along the spine. She continued well until four-and-twenty hours before her admission for the second time into St. Thomas's Hospital on April 14th of this year. She was now seventeen. She went out to service a week previously; found the work hard and her mistress exacting; and was attacked with a kind of fit, followed by similar jerking movements to those which she had suffered from on the first occasion. She was a healthy-looking, well-conducted, sensible girl. She had violent rhythmical spasmodic movements of the arms and legs, neck and trunk. These were most marked on the right side, and did not involve the muscles of expression or the tongue. They ceased during sleep. She had anæsthesia on the right side of the body, with impairment of smell and taste, and colour-blindness in the corresponding eye. There was slight tenderness in the ovarian regions, but chiefly in the right. Within a day or two the movements on the left side of the body subsided; but those on the right were more persistent, and though they practically ceased after a few days under the renewed use of faradaism (which she begged might be employed), there were slight and trivial recurrences from time to time. Her sensory phenomena varied. At the end of a few days the right-sided anæsthesia became replaced by hyperæsthesia; a little later the anæsthesia appeared on the left side of the body; then she presented universal analgesia, and shortly afterwards the analgesia was limited to the lower extremities. It may be noticed, that during all the variations of distribution of disturbances of ordinary sensation, colour-blindness persisted in the right eye and involved that eye alone; and that during at any rate part of the time in which she was suffering from general analgesia there was general loss of feeling in the lips, gums, tongue, and inside of the mouth, with notable impairment of taste and smell. During her stay in the hospital she had several fits, lasting from a few minutes to half an hour. These began with general tremors, passing into convulsive movements of a violent kind (associated with general rigidity), and were attended during the latter part of their duration by voluble, somewhat incoherent talk, which related largely to recent events and to [illegible] she had seen, and in which she made statements as to [illegible] which she would certainly not have made in her [illegible]. She appeared therefore to be conscious, but she had no recollection whatever after the fits of anything that had occurred during their continuance. It may be added that the fits were sometimes preceded by globus and followed by headache, and were unattended with [illegible] or discharge of evacuations. But lividity of [illegible] was observed once or twice at the early period of an [illegible] in one (during which the temperature was taken) [illegible] 101°. In the rigidity above referred to the [illegible] arched, the arms extended horizontally, and [illegible] extremities straight, the feet being extended at [illegible], and the toes flexed. The teeth were [illegible]. The right leg remained rigid for some hours after [illegible]. In this leg also at this time were observed [illegible] tendon reflexes and ankle-clonus. The last remaining hysterical phenomena were colour-blindness and a hitch in the action of the right leg in walking. She is now well.

There can be no doubt that this girl has been suffering from hysteria. The emotional origin of the attacks, the shifting sensory disturbances, the rhythmical muscular contractions, the fits, the ovarian tenderness, collectively establish the truth of this diagnosis. But it is worth while to observe that there was nothing in the manner or conduct or mental state of the girl to suggest hysteria. She was bright and sensible; she had a healthy appreciation of the ludicrous, and could join in the laugh which some of her performances excited, and especially was most anxious to be cured. Indeed, as has already been stated, it was at her own request that faradaism was applied; because, although the pain was dreaded by her, she had a vivid belief that she had been cured by it before. It is interesting to note that one of her fits came on at night, during sleep.

My special object in quoting this case is to call attention to the mental condition of hysterical patients in connexion with the convulsive attacks to which they are liable. It had generally been taught that hysterical fits were fundamentally different from epileptic fits, and that there could seldom or never be any real difficulty for a well-informed medical man to distinguish the one form of seizure from the other. It has latterly, however, been admitted that in certain aggravated forms of hysteria fits occur which partake of the special features of the paroxysmal attacks of both affections; and the term "hystero-epilepsy" has been invented to meet the requirements of the case. The classical descriptions of epileptic fits and of hysterical fits are founded on fact; their accuracy is confirmed every day; and it will be admitted that a typical epileptic fit and a typical hysterical fit stand in essential and striking contrast with one another. But it is rather by their collective phenomena than by any one distinctive feature that they must be discriminated. Even the sudden attack of profound unconsciousness which so commonly and characteristically marks the onset of the epileptic seizure, and has been largely regarded as the test and proof of epilepsy, may be present, I think, in affections which have no true claim to be regarded as epileptic; and may certainly be absent from fits whose epileptic nature is unquestionable. Another remarkable feature of epilepsy is the tendency which many epileptics have (sometimes previous to a convulsive seizure, sometimes in place of a fit, but more commonly in immediate succession to a fit, or rather perhaps as the later stage of it) to pass into a dreamy condition of shorter or longer duration; in which the mind is possessed, in one case, by wild frenzy, in another case by apparently a calculating and calm resolve to carry out some atrocious design; in which, in another case, the patient simply acts absurdly or incongruously, or even comports himself much as he would do in health; in which the motor functions obey the mental impulses as in the normal state; but on recovery from which the patient has either no recollection whatever of what happened during his period of mental aberration, or merely that kind of recollection which one has of a dream.

About two years ago a servant girl, seventeen years of age, came under my care. For two years she had suffered from headaches. At first they came on at long intervals, and lasted continuously for a week or two at a time. Latterly they had become more frequent and more severe, and attended with drowsiness, which made it difficult for her to perform her ordinary duties. On Easter Monday one of her attacks came on, and it continued until the following Friday, on the afternoon of which day she left her mistress's house to visit her mother, who lived four miles and a half away. She had often traversed the road before, and knew it perfectly; but, suffering still from headache, she got confused, and lost her way. She did not reach her destination till 10 o'clock P.M. on Saturday night, when she recollects sitting down upon her mother's doorstep, where she became unconscious, and remained so until aroused by some neighbour who recognised her. She retained a vague recollection of wandering about these many hours, and of occasionally asking her way of passers-by. What was her condition during all this time? Was she in an epileptic trance, or was her condition a phase of hysteria? There was no history of her ever having had a fit of any kind. She was healthy-looking and free from paralysis. But she was peculiarly slow in her speech and movements. She had spots of hyperæsthesia just above both clavicles and under both mammæ; and the right ovarian region was tender. Moreover, she had marked analgesia of both arms. During her stay in the hospital she suffered much from headache, but improved in this and other respects; the analgesia left the right arm; and the left became both analgesic and anæsthetic. There was still anæsthesia of the forearms when she left the hospital. I may add that careful inquiries were made, and left no doubt that the story the girl gave of herself was true. Collateral facts prove, I think, that the girl was hysterical, and render it pretty certain that her temporary mental confusion or obliviousness was also hysterical. But what she did is not unlike what epileptics do; of which I will quote a recent example.

A young man, a jeweller, twenty-two years old, had had fits for two years past. The first occurred just after getting out of the train on arriving at London Bridge. He came to himself nine hours and a half later, when he found himself in a cab near his own home in the suburbs of London. On getting out of the cab he was going to pay the driver, but was told that payment had already been made; and he found later that the fare had been taken out of his own purse. Another fit occurred a month ago. He was in Berwick-street, felt giddy, ran on a little way, and fell. He recollects nothing more until he found himself walking somewhere near the Great Northern Railway Station, a part of London in which he had no business. The last fit occurred near the Blind Asylum at St. George's-circus. He cannot recall the beginning of the fit, and recollects nothing until he awoke to consciousness some hours later, and found himself still walking somewhere about the circus. Now here, no doubt, the condition was epileptic, and the loss of consciousness, or rather the forgetfulness of what occurred to him during the attack, was complete. There is no evidence as to what he did during the periods which were a blank to him; though on one occasion it seems pretty clear that he must have appeared so far helpess as to justify his being taken care of. But on two other occasions at least, and in one of them for a period of some hours, his behaviour must have been such as not to attract any special attention. He probably acted like the girl, and as one knows epileptics are liable to act.

In the case of Hettie R——, the periods of mental aberration which followed her fits, in which she appeared to be conscious of what was going on around her, and talked incoherently, were a blank when she came to herself. She declared, and I believe, that she had no recollection whatever of anything that happened during their continuance. One of the most remarkable examples of this kind of phenomenon in an hysterical case that I know of was published by me in the *British Medical Journal* six years ago. The case is a voluminous one, and, indeed, is still in progress; but I will quote briefly so much of it as relates to the subject I am considering. The patient was a young lady whose hysterical symptoms commenced in the year 1873. They presented many variations during the next few years. She had cataleptic attacks, in which she became plastic, and in which her arms and legs could be bent into various attitudes, wherein they would remain indefinitely; and she had violent convulsions, alternating with a strange mental condition, which, after a few months, became established, and then continued for two years without change. During this period she could move her limbs freely, and, indeed, seemed to have much muscular power, yet was unable to rise from her bed, or even to feed herself without assistance. The least exertion was usually followed by an attack of profound syncope. She could feel, but there was total insensibility to pain, and she was absolutely deaf. On the other hand, she was closely observant of all that was going on round her; was voluble in her talk, her vocabulary being peculiar; would often sing; would never take food from anyone of her immediate friends or relatives; and was vindictive, biting if she had the opportunity, and concealing sticks or knives under her pillow, and striking anyone with them if she had the chance. For a long time her doctor was the only person she cared to see, or would obey; as soon as she caught sight of him, she would tremble with pleasure and eagerness, hold out her arms to him, catch hold of his hand, and fondle it in hers, and begin to talk volubly. She would first say, "Paws," which meant "shake hands"; and if he failed to respond she would become sullen, cry, and refuse food until he did; then she would say she had a lot to tell him, and would recount all that had occurred since his last visit. His visits, which were for the purpose of feeding her, were made three or four times a day. During the whole of this time she had a strong antipathy to her father and mother and other relatives, and did not even seem to recognise them for whom they were. She knew them, however, from one another, and gave them names. One sister she called "Dog," another sister "Fox," her mother was "that one," and her aunt was "the other one." I do not think that her father had a name, but she disliked him more than all the rest; and for a long time, as her fits were disappearing (for she remained liable to them), his presence alone caused them. At the end of the two years her mother, one morning, heard her heave a deep sigh, and saw her head drop suddenly on one side on the pillow. She thought she was dying, rushed up to her, and said, in alarm, "Do you know me, Edith?" when the daughter replied "Yes," in a scarcely audible whisper. This was the first indication of hearing and of recognising her mother which she had manifested. She remained in this condition for a few minutes, and then suddenly passed again into her maniacal state. From this time forward she had nearly every day one of these lucid intervals. At first they lasted perhaps for about ten minutes, but gradually they increased in duration, so that at the end of six months they often persisted from half an hour to two hours. They always came on in the manner above described, and ended suddenly. They were always characterised by the same phenomena; and these, it will be observed, were in many respects the exact converse of those which marked her maniacal state. While in them she seemed to possess all her normal qualities of mind; was quiet, lady-like, and affectionate; and knew and appreciated her father, mother, and other relatives and friends. But there was utter bodily prostration; she spoke in a whisper; her eyelids were closed without the power of opening, and tremulous, though she could see when they were raised for her; and her hearing, which in her other state was absolutely lost, was now preternaturally acute. Indeed, any slight shock, and especially a sudden noise, would render her at once maniacal. On the first occasion on which her doctor saw her in a lucid interval, he conversed with her quietly; asked her to put out her tongue, which she did; and then invited her to take food as usual, which she declined, but in a quiet, lady-like way, and simply because she was not hungry. He asked her if she knew him, and she said she did not. He then tried to feed her with a spoon, when she suddenly opened her eyes, was excited as usual at his presence, and at once greeted him with "Paws, doctor." The lucid intervals gradually increased in duration, and at the end of another five or six months they occasionally lasted for days together; and, moreover, as they increased in length the other intervals diminished, until after a while they constituted what might be termed mad fits of a few minutes' duration only. Further, the extreme bodily prostration of her lucid periods gradually lessened; and by degrees the power of opening her eyes, of speaking aloud, and of taking food, without going off into a maniacal paroxysm, was restored. In 1877 she had recovered completely.

During the prevalence of the alternating conditions above described she appeared while in the one to know absolutely nothing of what had occurred in the other, but retained a vivid recollection of all that had happened to her in the previous period of the same condition. Her recovery was of very short duration; and for a long time past she has been suffering from extreme contracture of one of her lower extremities, associated with occasional cataleptic attacks, lasting for several weeks at a time.

It seems to me that this girl's maniacal condition (of which she retained no recollection whatever when she was in her normal mental state) was the same in quality as the condition presented by Hettie R—— after the convulsive attacks; and I repeat that I can see no real difference between their mental affection and that which is presented by many epileptics.

In reference to the relation of hysteria to epilepsy, I may just allude, in passing, to the case of a young girl, Rose D——, who was three or four times under my care during the years 1881, 1882, and 1883. Her fits began when she was fourteen, a year before I first saw her. She was a plump, healthy-looking girl, suffering from fits which came on irregularly, having sometimes as many as fifteen in the day. They were generally preceded by a cry, sometimes by more than one; were attended with loss of consciousness and convulsions; and lasted, perhaps, for about half a minute. They were certainly, I think, epileptic. In favour of which view, it may be stated, that they came on when she was asleep, as well as when she was awake; that they were generally preceded by an aura beginning in the right thigh, rising to the right side of the chest, and then involving the right arm from the fingers upwards; that she once bit her tongue in a severe fit; and that she often passed urine during an attack. But she emerged from her fits into consciousness generally with a smile on her face, and occasionally laughing. Latterly she once or twice came to herself crying. It is further stated in the notes of the case, that when she was last under treatment she more than once was laughing during an entire fit, and on one or two occasions was attacked with causeless and uncontrollable laughter, without loss of consciousness.

3. I had intended, when first the subject matter of this lecture began to take form in my mind, to devote no inconsiderable proportion of it to the discussion of hysterical anæsthesia and its relations with anæsthesia arising under other conditions. This subject, however, is too extensive to be treated of at the fag-end of a lecture. And so I will pass on to the consideration of some of the visceral phenomena of hysteria.

a. In the *Practitioner* of 1883 I published some remarks on "The Functional Vomiting of Hysteria." This, as we all know, is a very common affection, and often a very serious one; and generally, I have no reason to doubt, depends on irritability of the stomach itself. But occasionally it is due to other causes, as one of the cases I there related proves.

A delicate-looking girl of fourteen came under my care in 1881, suffering from an hysterical affection of the right hip. This she had been troubled with for two years; and, though she had never had hysterical fits, or had hysterical symptoms in the popular sense of the term, every surgeon who had seen her previously, and my surgical colleagues at St. Thomas's now, had no doubt of the hysterical, or at any rate functional, nature of her disease. She improved slightly under treatment, during a three months' residence in the hospital. She was readmitted five months later, still complaining in some degree of her hip, but suffering mainly from constant vomiting, which she had had for several months, and great consequent emaciation and debility. She weighed only 3 st. 3½ lb., and was bedridden. Her cheeks were flushed, and her face wore a mixed expression of apathy and martyr-like resignation. She had no pain except in her hip; she vomited after every meal; and her abdomen was shrunken and concave. From the time of her admission she continued to vomit after whatever was taken, the vomit consisting mainly of the food swallowed and mucus, and the sickness generally coming on a few minutes after ingestion. It was sometimes, however, delayed for ten minutes or a quarter of an hour. Various measures were adopted to relieve the suspected irritability of the stomach; and at length she was fed only with enemata. During this time she lost weight slightly, her temperature sank to 96°, and her pulse varied from 42 to 60. After the feeding with enemata had been persisted in for ten days, the administration of milk by the mouth in teaspoonful doses was commenced, at first only three or four times a day, and then every hour. But again we were disappointed, for after every dose the milk was speedily vomited; in fact, her stomach appeared to be just as irritable now as it had been at first. At the end of four or five days, being much puzzled and disheartened, I gave more serious thought to the incidents of the case than I had previously done. I now called to mind that she had never complained of actual pain or tenderness in the region of the stomach; that she was not flatulent; that her vomiting was an easy process with her; and especially that she brought back the greater part of the minutest quantities of food taken, and in whatever form it was given. And I asked myself the question, Was it possible that the bulk of her food never entered the stomach at all, but was retained in the œsophagus, and thence regurgitated? I now made the girl drink a dessertspoonful of milk in my presence, and watched the progress of events. She swallowed it without difficulty, and evidently it went beyond the influence of the pharynx; then she appeared to suffer from some discomfort, and in the course of a minute or so (without any very violent effort, but with a certain amount of spasmodic action) the milk was gulped up into her mouth. I brought the resident assistant-surgeon to see the case with me; and at my request, and in my presence, he passed a medium-sized indiarubber tube along the œsophagus into the stomach, and then injected into that organ about three ounces of milk. There was a little impediment to the passage of the instrument through the lower part of the canal, but it was readily overcome, and was evidently not due to any organic disease. The milk thus injected did not provoke any feeling of sickness, and remained in the stomach without causing discomfort. She did, immediately after the removal of the tube, regurgitate a small quantity of milk, but this was clearly only the milk which had escaped into the œsophagus during the withdrawal of the instrument. It was intended to feed her daily by the tube, but she never required it again during her further stay of six weeks in the hospital. The result showed that my suspicions were correct; and it is an interesting practical fact that the spasmodic action of the œsophagus, which had persisted for months, was cured by a single operation.

In the same paper I quoted the case of a man who was affected with what seems to have been the same kind of œsophageal affection as that which this girl presented, but who manifested no other hysterical symptoms, and whose temporary spasm of the œsophagus can scarcely have been hysterical. The patient was over fifty years of age, and had suddenly (a week before I saw him) become incapable of swallowing. He had been a healthy man, and there was no explanation of his state that I could make out; he had been wholly without food for a week, and had consequently lost flesh and strength. On making him take food in my presence I found that he masticated properly, and that the act of deglutition was performed without difficulty, but that what he swallowed was immediately ejected with violence. The impediment was clearly in the upper part of the œsophagus. Having failed to detect any lesion by external examination or by looking down the throat, I proceeded to pass a bougie. There was a very slight impediment at the upper part of the gullet, which was readily overcome, and the instrument was pushed on into the stomach. The effect was marvellous; the patient swallowed without the slightest difficulty immediately afterwards, and swallowed thenceforth as readily as he had always done up to the time of his illness. He came under my care again six months later for a temporary attack of catarrhal jaundice, from which he recovered in the course of a week or ten days. He had had no recurrence of dysphagia.

On the same occasion I published a third case, which was one of painful interest to me, for I failed to recognise its nature, and it is mainly, perhaps solely, to this failure that the patient's death must be attributed. The patient was a young man, whose illness had commenced six months before I took charge of him, and was attributed by him to his having drunk a pot of beer which irritated his gullet as it passed down. From that time he seems to have had constant sickness after food, and to have vomited from five minutes to half an hour after every meal. He was very thin and weak when I first saw him, but I was unable to detect any evidence of abdominal disease. I attached very little importance to the attributed origin of his illness, and assumed that as his vomiting was often, indeed generally, delayed for some considerable time after the ingestion of food, it was due either to pyloric obstruction or to some functional disturbance of the stomach referable to disease external to it. In other words, though I never ventured to commit myself as to the exact nature of his malady, I believed that he had organic disease, either chronic ulcer or cancer of the stomach, or disseminated peritoneal cancer, or tubercle. There were obvious and strong reasons against each of these views of his case; but, believing as I did that the vomited matters came from the stomach, I never thought of passing a bougie or of feeding him by the œsophagus tube. His vomiting persisted up to the time of his death. At the autopsy his stomach and other abdominal organs were all found to be healthy, and the only lesion discovered was dilatation of the œsophagus with hypertrophy of its walls. Whether this condition was really a consequence of irritation caused by the draught of beer to which the patient referred his illness, or whether it was analogous to the similar condition observed in the large intestine in cases of neglected peritoneal constipation—a condition secondary either to sluggish action of the dilated tube, or to spasmodic action of the part below,—I cannot venture to say. But if the latter view be correct, the essential similarity of this case to the other two becomes apparent.

b. Besides aphonia, other symptoms referable to the respiratory organs occur in cases of hysteria. I shall not enumerate them, but will briefly speak of two or three. I recollect some five-and-twenty years or more ago a nurse, aged thirty-six, was admitted into the hospital under the care of one of my senior colleagues. She was suffering, not only from aphonia, but from difficulty of breathing. Her medical attendant believed the case to be one of hysteria, but he was not absolutely sure upon that point; and, as her dyspnœa increased in urgency, he judged it advisable to have tracheotomy performed. The operation was done by a surgeon (long since dead), who transfixed the trachea and *passed the trocar and cannula into the apex of the right* pleura. Strange to say, the patient seemed to be immediately benefited; but within half an hour the right pleura had become distended with air, and difficulty of breathing of another kind had come on. She died in a couple of days from the results of the operation; and the larynx was found to be absolutely healthy. The case occurred before the invention of the laryngoscope, or the thermometer had come into use as an agent in diagnosis. Here the dyspnœa was probably due to functional affection of the larynx. In a case of my own, that of a highly hysterical girl of eighteen (who was under treatment for many months with hysterical paraplegia, attacks of hystero-epilepsy, and analgesia), dyspnœa of an asthmatic character formed one of her symptoms. This came on quite suddenly on the first occasion, and was unattended with rise of temperature; but it continued for five or six weeks with varying severity, and during this period became associated with rapid breathing, frequent cough, and scanty expectoration, occasionally tinged with blood. At times, too, there was a slight rise of temperature. An attack a few months later presented similar phenomena. But rapidity of breathing may constitute the sole respiratory trouble. I recollect about ten years ago having a female patient under my care—I think between thirty and forty years of age—who, with other hysterical symptoms, suffered from attacks of rapid breathing, during which, sometimes only for a few minutes, sometimes for several hours, her respirations would rise to 70 or 80 in the minute, her pulse remaining normal in frequency, and there being no other indication whatever of intrathoracic disease. In 1883 Dr. Mackey of Birmingham published in THE LANCET a similar case in which the respiratory acts varied between 88 and 128 in the minute, while the pulse ranged from 59 to 72, and the temperature was normal.

c. Circulatory troubles are also common in hysteria. Limited pulsations, mainly of the abdominal aorta, simulating aneurysm, have often been referred to this affection. Rapid action of the heart, tumultuous and irregular action, and extreme feebleness of action, are severally frequent consequences of emotional conditons, and necessarily, therefore, are frequently observed in hysterical patients. I have recently seen a remarkable case of what seems to me to have been functional, not improbably hysterical, rapid action of the heart. A lady, thirty years of age, three years married and without children, had a slight attack of pneumonia, from which, at the end of about five weeks, she had recovered sufficiently to be allowed to go out for a drive. This seems to have upset her, for shortly afterwards she was attacked with retching, difficulty of breathing, and nervousness. The retching subsided in the course of a day or two, but it was noticed that her pulse was remarkably rapid. It reached 180 in the minute, and as her aspect became rather livid, and she was unable to lie down, her medical attendant naturally became uneasy. When I saw her a week later she was sitting up in bed; she was spare, pale, and delicate-looking, with a shade of anxiety on her countenance, but nevertheless she was bright and cheerful, conversed pleasantly and without difficulty, and certainly did not look seriously ill. Her breath was a little quickened, but her heart was beating at the rate of 192 in the minute; the action was regular, the pulse was feeble, and the cardiac sounds, which were sharp and short, were free from murmur. The lungs were both healthy, and there was no evidence of disease in any other organ of the body. Her tongue was a little coated, and her appetite bad. This rapid action of the heart, which had existed for a week when I saw her, continued for another week, when it fell almost suddenly to 110, and then to 92. I visited her again soon afterwards, when she seemed quite well, but her pulse was still 92. The patient had always been delicate and nervous, but had never presented definite hysterical symptoms; formerly she had been stout, but some years ago became slim, and has since continued so. She never had rheumatism or any other serious disease; but during the last few years she has had several attacks like the present, and there is reason to believe that her pulse has been generally rapid. There was no protrusion of the eyeballs or enlargement of the thyroid. So far as I can call to mind, I have only on two other occasions met in adults with more rapid action of the heart than was presented by this lady. But the patients here referred to were dangerously ill, and their extreme rapidity of pulse occurred at times when death seemed imminent. One case was that of a young woman, in whom in the course of a very severe relapse of enteric fever, and when for some days her death was expected momentarily, the pulse continued at the rate of 198 in the minute. She ultimately recovered. The other case was that of a middle-aged man who had been suffering for two years from gradually increasing pallor and debility, and whom, when he came under my care, I thought to be suffering from progressive anæmia. He improved, however, considerably under treatment, and left the hospital stronger and better than he had been for many months. One day, shortly after his admission, he fell, without obvious cause, into a state of collapse, and occasionally this was so extreme that his recovery was despaired of. During these attacks his pulse from time to time ran up to 200. His collapse was not due to hæmorrhage.

4. At the beginning of my lecture, gentlemen, I said I should not then attempt to define hysteria, or to fix the landmarks which separate it from other functional nervous disorders. At the close of my lecture, guided in part by the cases that have been passed in review, I return to the subject I at first dismissed. I have quoted a series of cases which I have labelled "hysteria," and have compared them with other cases, some of which I have regarded as not hysterical. But what right have I to make this distinction between them? Again, I ask what is hysteria?

Typical hysteria occurs, or generally appears for the first time, in persons who from sex, age, or the conditions in which they live, are specially emotional; it is attended with marked emotional disturbance, sometimes with intellectual disturbance, and is characterised by a liability to convulsive attacks, and to various affections of the sensory and motor systems, which are sometimes of general distribution, sometimes hemiplegic, sometimes paraplegic, sometimes limited to particular nerves or groups of nerves. The affection, moreover, is various in its incidence, and liable to sudden onset, sudden change, sudden recovery—circumstances which prove its independence of organic nervous disease.

But hysteria may occur with many of its characteristic symptoms highly aggravated, with many of its characteristic symptoms in complete abeyance, or indicated haply by only one or two trivial incidents. The emotional and intellectual disturbance may pass into genuine madness, as in so-called "hysterical mania." The convulsive attacks may resemble, if they do not merge in, those of epilepsy, as in cases of so-called "hystero-epilepsy." On the other hand, there may not be, and there may never have been, definite or discoverable emotional disturbance or tendency, never any convulsive attacks, never hemiplegia or paraplegia, and, indeed, the manifestations of the disease may be limited, so far as I know, to an attack of neuralgia, to painfulness and tenderness of a particular organ, to paralysis or spasm of a single muscle or a group of muscles, or to some functional disorder of a single viscus.

In other words, so-called "hysteria" may, as it seems to me, consist in excess, diminution, or modification of all or any of the nervous functions, whether of the brain, the ganglia at the base of the brain, the medulla, the cord, the sensory or motor nerves, or the sympathetic system. And hence, by specially implicating particular parts, it may, in its symptoms, resemble, more or less accurately, a large number of organic diseases of the nervous system developed in the same parts. And hence also, and on similar grounds, it may resemble, more or less accurately, many other recognised functional disorders of the nervous system, which are regarded as definite diseases, and have received distinctive names, if indeed, under such circumstances, it does not become indentical with them.

No doubt an emotional element preponderates in cases generally regarded as hysterical; and, for the most part, definite hysterical symptoms are the consequence either of overwhelming emotions excited in healthy minds, or of lesser emotional influences acting on minds already in a state of unstable equilibrium. But it must not be forgotten that emotional disturbance characterises, or complicates, a large number of intra-cranial disorders which are not of hysterical origin. It is of the very essence of insanity; in chorea, in megrim, and in epilepsy, especially in the first, the emotions are generally implicated; the presence of syphilitic tumours, and generally disease in the neighbourhood of the fourth ventricle, evoke a tendency to laugh and cry, and to become erotic; and the lowness of spirits and proneness to tears which follow hæmorrhage into the brain are well known. Emotional affection is, therefore, no monopoly of hysteria. And not only so; for while we might naturally expect emotional symptoms to preponderate when the other hysterial symptoms are such as depend on cerebral disturbance, we might as naturally expect these to be less and less pronounced in proportion as the hysterial phenomena become more and more limited to remote and less important parts of the nervous organism. And so no doubt it often is.

The view which I am inclined to hold with respect to hysteria and other functional nervous diseases, and to their mutual relationships, is as follows. There are many functional diseases of the nervous system, among which may be included insanity in many of its forms, epilepsy in its different varieties, chorea, megrim, neuralgia, and hysteria. These are all characterised by groups of symptoms referable to excitement, depression or aberration of the nervous functions, and mainly of those of the nervous centres. They are severally distinguished clinically by the association of definite groups of symptoms; determined either by the particular part of the nervous system affected, by the special kind of affection which takes place therein, or by the order and mutual relation of events. And we regard them as specific diseases, because experience teaches us that such groups of symptoms are so commonly observed under particular conditions as to show that specific causes must underlie them and determine their concurrence. But the causes of the different affections are for the most part closely related to one another, if not identical; the individual symptoms which, by their modes of aggregation, constitute the several diseases as we know them are common more or less to all of them; many cases occur in which it is difficult, if not impossible, to determine satisfactorily in which category they should be placed; and, indeed, as it seems to me, there is no substantial line of demarcation between the diseases.

If this view be correct, the terms insanity, epilepsy, hysteria, &c., would still imply well-marked, and for the most part permanent, varieties of functional nervous diseases; but the recognition of intermediate types, or the failure to form a definite diagnosis in every case, could not be taken to imply ignorance; and it would follow that many of the limited functional disturbances of which several of my cases furnish examples have little or no claim to be called hysterical (an adjective which is usually, and perhaps conveniently, applied to them), unless the meaning of the word hysteria be so far extended as to include all functional affections for which no other name has yet been invented.

In conclusion, I may venture to say, the more extensive my experience of nervous diseases has become, the more I have learnt to recognise the following facts: that many grave nervous disorders which, from their mode of onset, their symptoms, and their progress, would seem to imply the presence of organic disease, present post mortem no visible pathological change, that many such disorders, progressive and threatening a fatal issue, ultimately recover perfectly, that limited or localised nervous phenomena, paralytic or spasmodic, anæsthetic or neuralgic, come and go without obvious cause; and the more I have been brought to believe that functional nervous disorders capable of cure simulate the most serious as well as the most trivial cases of organic nervous disease. It may be admitted that emotional persons, and persons of marked hysterical tendencies, are more than others liable to suffer from the affections here referred to; but some of the most remarkable examples I have met with have been in patients who, apart from their particular malady, have presented no sign or symptom whatever of the hysterical condition.

I thank you, Mr. President and Gentlemen, for the high honour you have done me in inviting me to deliver this address, and for the kind patience with which you have listened to it. I wish it had been more worthy of the occasion and of my audience.

St. Mary's Hospital.—The festival dinner in aid of the funds of this hospital is to be held on Wednesday next, at the Langham Hotel. George Palmer, Esq., M.P., will preside.

ON

HEALING BY FAITH, WITH REFERENC TO A VISIT TO THE GROTTO OF LOURDES.

By GEORGE BUCHANAN,
PROFESSOR OF CLINICAL SURGERY IN GLASGOW UNIVERSITY.

Public attention has recently been directed to certain alleged cures which are said to have been performed by members of the Salvation Army, as it calls itself. These recoveries are stated to have taken place after prayer and the laying on of hands. It is not claimed that anyone has obtained the gift of working miracles; but it is claimed that through faith in the efficacy of the prayer the person so believing obtains the benefit of direct divine interposition. It is religious faith in the efficacy of the prayer that alone secures the desired result. The co-operation of the desire, will, and faith of the patient are necessary for the effect to follow. If, as frequently happens, there be a misgiving of the expected cure, it is set down to want of desire and faith. Mr. Spanton has taken the trouble to investigate a number of the alleged cases in which the affection said to have been cured was almost exclusively subjective—pain, dimness of vision, dulness of hearing called deafness, &c. So far as he was able to estimate, the improvement was not discernible by such tests as he was able to apply.

There is nothing in medical diagnosis more difficult than to distinguish between real and feigned disease. Even in such manifest things as alleged stiffness and powerlessness of joints it is not easy to detect assumed conditions. Anyone who has much experience of hospital practice, or has seen a little military service, knows how difficult it is to detect malingerers. When I was on duty in the camp hospital in the Crimea I had occasionally to examine men who asserted that they were unfit to return to duty owing to pain, stiffness, and want of power in their shoulder- and elbow-joints, and I sometimes failed to detect the imposture, till I got the assistance of a colour-sergeant who was one of my patients. By making them go through a certain amount of drill in the hospital tent, one or two forgot or omitted the sort of deficiency of movement which must have existed if the alleged affection was real. How much more deceptive when the symptoms are subjective.

I wish, however, to call attention to a class of cases, less numerous but more marked, in which there is a real abnormal condition, accompanied by all the symptoms and sufferings of structural disease, in which the patient loses sleep and appetite, and emaciates, and frequently dies of exhaustion, while all the time the disease is nervous and not organic, mental and not bodily. I believe that some such cases have been restored to health by what is called healing by faith in prayer. I know that many such have been apparently miraculously cured by a visit to the miracle grotto of Lourdes.

In the autumn of 1883, when on a tour in the Pyrenees, I paid a visit to this spot, now such a celebrated shrine of the Roman Catholic faith. At the mouth of the grotto, at which a vision of the Virgin is said to have appeared to a poor girl, Bernadette Soubirons, are suspended numerous crutches, splints, &c., said to have been left there by persons who came lame and walked away restored to the use of their limbs. I believe that some of these cases are sufficiently well attested to make it quite certain that a number of apparently miraculous cures of halt, lame, and decrepit persons have actually occurred there. And this fact, which cannot be denied, is used as an argument to prove that the grotto is the seat of direct divine interposition, and the water which flows from it is endowed with miraculous healing power. On reflecting on the credibility of the alleged miraculous cures, which are so often appealed to as a proof of the truth of the story, it is no argument against the belief in them that multitudes of the patients who have visited the grotto and used the water have been disappointed in obtaining a cure. One positive is worth a thousand negatives. The difficulty in such cases always will be to get well-authenticated cases reported on by unbiassed judges who are competent to investigate them. For myself I have no doubt that some of the persons who went lame and crippled were restored to the use of their limbs and were relieved from pains and aches

And if we admit some, the question of number does not affect the argument. With regard to partial deafness and dimness of vision which are among the ailments said to have been cured, so much depends on the assertions of the persons affected that I would place little reliance on them; but with regard to persons who have been lame and decrepit, and known as such to their friends, the fact of their leaving their crutches and walking away without help does seem astonishing and miraculous, and it is cases such as these which make the greatest impression. I believe that the simple visit to the grotto by persons who believe in it, and the whole surrounding of the place, might have such an effect on the mind that a sudden change of the nerve condition might result in immediate improvement in cases where there is no real change of structure, but where the malady is a functional imitation of organic disease. Such cases are familiar to all medical men, and are the most intractable they have to deal with, the disorder being in the imagination, and not in the part. To non-professional persons this assertion may seem an enigma. It is an enigma to medical men, but it is none the less true. But instead of pursuing this general statement I shall relate cases within my own experience.

It is rather a remarkable coincidence that on Oct. 2nd, 1883, within three weeks of my visit to Lourdes, I received a letter from a Mrs. F——, reminding me that some years before I had performed in her case a cure, instantaneous and to all appearance miraculous, and which she properly attributed to undoubting faith in my word. It is a very good illustration of the kind of cases to which I have been alluding, and of the power of mind over mind, and of the effect of imagination in simulating real disease.

Mr. F—— called on me in October, 1875, and requested me to visit his wife, who had been confined to bed for many months with a painful affection of the spine. When I went to the house I found Mrs. F——, a woman about thirty-one years of age, lying in bed on her left side, and her knees crouched up, that being the position which afforded most relief. She was thin and weak-looking, with a countenance indicative of great suffering. I was informed that for many months she had been in the same condition. She was unable to move her limbs, any attempt being attended with pain, and practically she was paralytic. She was not able to alter her position in bed without help, and this always gave so much trouble that she would have remained constantly in the same position if the attendants had not insisted on moving her, to allow of the bedclothes being changed and arranged. She had altogether lost appetite and had become dreadfully emaciated, and only took what was almost forced on her by her husband and friends. She had given up all hope of recovery, but had expressed a strong desire to be visited by me, in consequence of something she had heard from her husband connected with a health lecture he had been present at many years before. When I entered her bedroom, something in the way she earnestly looked at me suggested the idea that I might have some influence over her supposing it to be a case of hysterical spine simulating real spinal irritation and sympathetic paralysis. The story I got was not that of real organic disease of the spine or cord, or limbs; and I at once resolved to act on the supposition that it was subjective or functional, and not depending on actual molecular change or disintegration. I went to her bedside and said, suddenly, "I cannot do you any good unless you allow me to examine your back." In an instant she moved slightly round and I examined her spine, running my finger over it, at first lightly, then very firmly, without her wincing at all. I then said, "Get out of bed at once." She declared she could not move. I said, "You can move quite well, come out of bed," and gave her my hand, when, to the surprise of her husband and sister, who looked perfectly thunderstruck, she came out of bed with almost no help at all and stood alone. I then said: "Walk across the floor." Now without demur she walked without assistance, saying, "I can walk quite well, I knew you could cure me; my pains are gone." She then went into bed with very little assistance, lay on her back, and declared she was perfectly comfortable. She was given a glass of milk, which she took with relish, and I left the house, having in a few minutes performed a cure which to the bystanders looked nothing short of a miracle. For many years I heard nothing of Mrs. F——, when on October 2nd, 1883, I got the letter referred to, and shortly after the patient herself called at my house. In February, 1885, she again called on me. She is at present in fair health, not robust, but cheerful and contented. She says she never altogether regained her full strength, but as an evidence that she is not feeble or unable for a good deal of exertion, I may state that she now lives about five miles from my house, and she made her way alone, partly by omnibus, partly by tramway, and the rest on foot.

About two years ago a carriage and pair arrived at my door from the country. In it was a woman about twenty-five years of age, her limb bound up in a splint and resting on the seat opposite to that on which she sat. She was accompanied by her father and brother, who, with the assistance of the coachman, carried her into my house and laid her on the sofa of my consulting-room. She told me she had been confined to bed for four or five months with disease of the knee, but that it had lasted longer than that. It was only the last few months that her medical attendant had enjoined absolute rest in bed, had used blisters and other applications, and had in the end secured it from movement by the application of a splint. She said the pain was very severe, increased on any movement, and was worse at night. There was little if any swelling, but the symptoms were very characteristic of disease of the cartilages of the knee-joint, and undoubtedly she was being treated for that affection. On manipulating her knee whilst I engaged her attention by asking her questions, I became aware that she did not shrink from my touch, as she did when I asked her if she felt pain on pressure; and I was soon convinced that I had to do, not with an organic disease of the joint, but with that strange, painful, and intractable condition which, for want of a better name, we call "hysterical knee." I turned to her and said decidedly, "Your knee is quite well; get up and walk." She at first objected, in consequence of the fear of pain; but when I said, "You will walk quite easily without pain," she got up and, to her own surprise, as well as that of her companions, she walked across my room, saying, "You are quite right; I have no pain, and my knee is cured." A few minutes after she left the house, got into the carriage without much assistance, and drove away. About a month afterwards a person from the same country town had occasion to call on me and spoke of the extraordinary instantaneous cure. I asked if he knew how the person was, and he said she was a friend of his own, and just the day before he had seen her walking as if nothing was wrong with her limb. And he knew that she had been confined to bed with her knee for months.

I cannot pretend to explain these two cases; they are certainly not miracles. But they are just as miraculous as any of the cures alleged to have been performed at Lourdes or elsewhere. Of the many thousands annually attracted to that spot a great number must be cases analogous to those I have related, and the alleged sudden cures are not more numerous in proportion than those which have occurred in medical practice. There are, however, some cases which cannot be included along with those to which I have referred. Cases in which instantaneous cure has taken place, or is alleged to have taken place, in such maladies as ulcers, sinuses, and easily recognised disintegration of bone. Such examples have been reported and vouched for by several French medical men and are referred to in an article in the *Nineteenth Century* for 1882; and I admit that the explanation is not applicable to them. I have not seen the official reports of the cases, so that I cannot admit or deny their accuracy. If there is no fallacy in them, they are beyond my understanding. But in the meanwhile the purpose of my paper is served if I have shown that many sudden cures may be explained without admitting miraculous interposition.

Glasgow.

UNIVERSITY OF CAMBRIDGE.—At a congregation on June 11th the following were appointed examiners:—Third M.B. Examination: Dr. Octavius Sturges, Emmanuel; Dr. Norman Moore, St. Catharine's; Dr. Donald Macalister, St. John's; Dr. W. O. Priestly, Edinburgh. Surgery: Mr. Christopher Heath, F.R.C.S., Mr. David Colley, Trinity. State Medicine: Dr. Alfred Carpenter, London; Dr. F. B. de Chaumont, Edinburgh; Dr. Hubert Airy, Trinity; Sir Charles A. Cameron, President of the Royal College of Surgeons, Ireland. Also the following degrees were conferred:—Doctors of Medicine: Audley Cecil Butler, Trinity; Jamieson Boyd Hurry, St. John's. Bachelors of Medicine: Richard Henry Emerson, Clare; John Mitchell Clarke, Charles Scott Sherrington, Dudley Charles Trott, Gonville and Caius; Walter Spencer Anderson Griffith, Downing.

WHY DOES SALICYLIC ACID CURE RHEUMATISM?[1]

BY P. W. LATHAM, M.A., M.D., F.R.C.P.,
DOWNING PROFESSOR OF MEDICINE, CAMBRIDGE; SENIOR PHYSICIAN TO ADDENBROOKE'S HOSPITAL.

WHY does salicylic acid cure rheumatism? This, gentlemen, is the question I venture to bring under your consideration to-day. The brilliant success which attends the proper administration of the remedy in this disorder is at once sufficient to fascinate us; there is something so decided in its action, so marked in the way it controls the heat and nervous and vascular excitement, and in the rapidity with which the great pain and swelling of the joints decline, that we are impelled to pause and think and question ourselves, How is this possible? Here is a disorder which under different treatment may exist for weeks stationary, so to speak, in its intensity, the great heat and nervous and vascular excitement, and pain and swelling exactly of the same amount to-day as they were weeks ago; a disorder which less than fifty years since was said to be "often such in itself and such in its appalling incidents as to need from time to time that medicine should put forth the full compass of all its powers. Every organ or system of organs which either directly or indirectly can receive the impression of remedies are from time to time called to bear all that they can possibly endure; and it is often only when the powers of medicine are pressed even to the verge of destroying life that life is saved."[2]

And now, by means of our new remedy, the disease seems to be curbed and checked and controlled. Surely we have here one of the greatest triumphs of the practical medicine of to-day, and a subject therefore worthy of consideration and investigation. And as the mind dwells upon the subject, points which physiology and pathology have left obscure rise up and add intensity to our interest and give increased importance to our inquiry; for we see how far beyond this one disease the interest reaches, how many are the problems it would help to clear up, and we become the more eager to obtain an answer. Can the answer be given? Let me take you to the bedside, and let us learn first of all what is to be gathered from practical medicine. Here is an example, such as will have occurred in the experience of each individual whom I am addressing. You are called to a patient who after a chill, and feeling out of sorts for two or three days, wakes up in the morning with one of the joints stiff and tender; soon afterwards it swells, and motion causes pain. Other joints now become affected; the knees, wrists, elbows, ankles, and the smaller joints of the hands and feet. There are pain, tenderness, increased heat, swelling, and redness of the skin. The slightest motion becomes insupportable, even vibration of the room or of the bed causes suffering. There is more or less febrile movement, the temperature ranging from 102° to 104° or higher, generally more or less sweating, the odour of which is characteristic. The tongue is coated; thirst is generally a marked symptom. These symptoms, varying in intensity, have perhaps continued many days. With or without the administration of a purgative, as the occasion requires, you place the patient fully under the influence of salicylic acid, and in from forty to sixty hours, not unfrequently in a shorter time, the pains in the joints have subsided, the limbs can be freely moved, and the bodily temperature has reached the normal condition. And this example may be indefinitely repeated. Patients presenting the same sort of history, the same picture of suffering and high fever, numerous joints swollen and intensely tender, and all this you subdue completely and effectively with your remedy in a few hours or days. But more than this—and here the remedy shows its signal power,—in no case of rheumatism that has come under my care during the last five years either in hospital or private practice has there been, where the heart was previously sound, any cardiac complication, such as endocarditis or pericarditis, developed. If this can be maintained and proved, we have indeed in our hands a most potent remedy. Cardiac complications constitute the chief danger of acute rheumatism, and the danger, if the disease is taken in hand soon enough, may with our new remedy be averted.

And what are the conditions, then, which in acute cases will ensure success in the administration of the remedy?

First, the true salicylic acid obtained from the vegetable kingdom must alone be employed. If you have to give large doses, avoid giving the artificial product obtained from carbolic acid, however much it may have been dialysed and purified. An impure acid will very quickly produce symptoms closely resembling delirium tremens.

Secondly, give the acid without any alkali or base. A very good form is to mix 100 grains with 15 of acacia powder and a little mucilage. Allow the mass to stand and harden, and then divide into 30 pills.

Thirdly, place the patient fully under the influence of the drug—that is, let him have sufficient to produce cerebral disturbance—i.e., buzzing in the ears or headache, or slight deafness; with the development of these symptoms the temperature and the pain in the joints will begin to decline. To an adult I generally administer three doses of 20 grains (six pills) at intervals of an hour, and if the head remains unaffected, a fourth dose at the end of another hour; and then repeat the 20 grains every four hours until the physiological effect of the remedy shows itself. In the majority of cases from 80 to 100 grains are enough. In severe cases 140 to 150 may be required. Afterwards about 80 grains a day are sufficient, and as the temperature declines smaller quantities will develop their physiological effects, 60 or even 50 grains being then sufficient to produce cerebral disturbance. It would appear that as long as the rheumatic poison is circulating in the system, the physiological effect—that is, the effect it produces in the healthy organism—does not show itself; acting as an antidote, the greater the amount of poison the larger must be the dose of the remedy; but as soon as the formation of the *materies morbi* is stopped, then the excess of the remedy acts as it would in the healthy organism and its peculiar physiological effects are developed. It is a very striking illustration of the difference between the therapeutical effect of a remedy and its physiological action.

Fourthly, give the patient from 40 to 80 grains daily for ten days after all pain and pyrexia have passed away.

Fifthly, let the patient's diet consist entirely of milk and farinaceous food for at least a week after the evening temperature has been normal. On the other hand, if the patient has meat and soup, you may look forward with fair probability to a relapse.

Sixthly, take care to maintain a daily and complete action of the bowels. Calomel is the best purgative, from 2 to 5 grains at night, followed in the morning, if necessary, with a saline draught. This is the most important adjuvant to the action of salicylic acid, and I will presently explain to you why this is the case. The benefits resulting generally from the so-called purgative plan of treatment have always been recognised by the older physicians as striking and satisfactory.

Seventhly, let the patient be enveloped in a light blanket, and with no more bedclothes than are sufficient to keep him from feeling cold. The object of the treatment now is to cool the patient, not, as in former times, to sweat the poison out of him, and the cooler he is kept the sooner will the temperature be lowered.

These are the seven rules upon which I have acted. I have given the true salicylic acid where there have been both aortic and mitral mischief; and I have also given it in rheumatism complicated with pericarditis, and as yet I have seen no bad result from it. Of course in cases of pericarditis, accompanied with delirium, the use of the remedy requires caution; you cannot tell when the system is saturated with the remedy, and you must therefore trust to smaller doses and other means for controlling the disease. Further, if pericarditis or endocarditis, pneumonia, or pleurisy have been developed, the remedy is powerless over the mischief which is done; it will neutralise the poison producing the mischief so as to stop its extension, but the inflammatory exudations will undergo their usual changes unabbreviated in their course.

And what is the poison? One of the most prominent features in an acute case of rheumatic fever is the formation of lactic acid in large quantities; and the so-called lactic acid theory of the causation of rheumatism is one which has got a very firm hold of the minds of many physicians, probably of most of those whom I have the honour of addressing. It was the view with which I started four or five years ago when I resolved to try and help to unravel some of the mysteries of the disorder, and a view which I have held till very recently. Nevertheless, I hope to show now that though lactic acid has much to do with the symptoms, it is not the chief substance which causes the disease, nor that upon which salicylic acid chiefly acts as an antidote.

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[1] An Address delivered before the combined meeting of the East Anglian, South Midland, Cambridgeshire, and Huntingdonshire branches of the British Medical Association, held at Cambridge, June 12th.

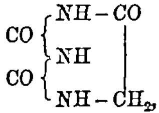
[2] Dr. P. M. Latham's Works, Sydenham Society, vol. i., p. 112.

It is the excessive formation of glycocine and of uric acid in the tissues that develops the symptoms of rheumatic fever, and salicylic acid cures the disease by combining with the antecedents of these bodies and preventing their formation.

Last year, as some of you are aware, I published a short paper on uric acid,[3] in which I endeavoured to show that this substance resulted from the conjugation of glycocine with urea, or its antecedents, forming the compound.

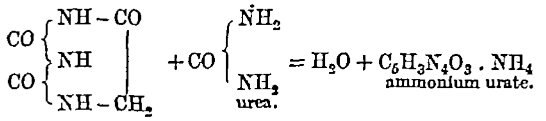
$$\left.\begin{matrix}\mathrm{CO}\\ \mathrm{CO}\end{matrix}\right\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{NH}\\ \mathrm{NH-CH_2-COOH};\end{matrix}$$

that is, a compound containing one more molecule of CONH than hydantoic acid, and allied to biuret and allophanic ether. This substance dehydrated would form



$$\left.\begin{matrix}\mathrm{CO}\\ \mathrm{CO}\end{matrix}\right\{\begin{matrix}\mathrm{NH-CO}\\ \mathrm{NH}\\ \mathrm{NH-CH_2},\end{matrix}$$

which, like hydantoin, being soluble in the blood, passes on to the kidneys, and is there conjugated with another molecule of urea, and forms ammonium urate.



$$\left.\begin{matrix}\mathrm{CO}\\ \mathrm{CO}\end{matrix}\right\{\begin{matrix}\mathrm{NH-CO}\\ \mathrm{NH}\\ \mathrm{NH-CH_2}\end{matrix} + \underset{\text{urea.}}{\mathrm{CO}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{NH_2}\end{matrix}\right.} = \mathrm{H_2O} + \underset{\text{ammonium urate.}}{\mathrm{C_5H_3N_4O_3\,.\,NH_4}}$$

which is excreted; but a portion overflowing from the kidney into the general circulation, and meeting with soda in the blood, is converted into sodium urate.

I there maintained that whereas in diabetes the essential fault consists in the inability of the system, either in the liver or elsewhere, to effect the metabolism of glucose, in gout the fault consists in the imperfect metabolism of glycocine, or amido-acetic acid. Glycocholic acid, as we know, is one of the constituents of the bile, and poured out into the duodenum performs its function in digestion, and is there resolved into cholic acid and glycocine; the latter being reabsorbed into the liver and transformed, and a corresponding amount of nitrogen being subsequently eliminated as urea by the kidneys.

We know that by atropine we can by paralysing the end organs of the nerves modify the functional activity of the submaxillary gland, and by urari we can in the same way modify the functional activity of the muscular tissues. Further, that the central nervous system possesses the power of varying the functional activity of the tissues, and we can readily understand that if this functional power of the liver were lessened in a certain degree, the glucose conveyed from the portal system would pass unchanged through the liver into the general circulation and produce the symptoms which accompany diabetes. If the power were lessened in a different degree, then glycocine would no longer be transformed by the liver, but, being conjugated with other substances, give rise to uric acid, which acting upon the portion of the nervous system which controls the nutrition of the joints would under certain circumstances give rise to the phenomena of what we call a gouty paroxysm. Here, then, we have diabetes and gout both commencing, so to speak, at the liver, and in such cases the diabetes would be relieved by the avoidance as much as possible of farinaceous and saccharine food. The gout would be prevented or relieved by a diet largely farinaceous and by eliminating the glycocine from the system and by giving as little nitrogenous food as possible.

Now, what happens when salicylic acid is administered internally? It passes off by the urine as salicyluric acid—that is, it has combined in its passage through the system either with glycocine or its antecedent, for on treating salicyluric acid with fuming hydrochloric acid, it is resolved into salicylic acid and glycocine.

$$\underset{\text{salicyluric acid.}}{\mathrm{C_9H_9NO_4}} + \mathrm{H_2O} = \underset{\text{salicylic acid.}}{\mathrm{C_6H_4}\left\{\begin{matrix}\mathrm{HO}\\ \mathrm{COOH}\end{matrix}\right.} + \underset{\text{glycocine.}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{COOH}\end{matrix}\right.}$$

Consequently in the system, by *seizing* either upon glycocine or its antecedent, salicylic acid takes away an essential constituent of uric acid, and so prevents the formation of this body.

I have referred to the antecedent of glycocine. Let me say a word about this. In a paper recently published[4] I have endeavoured to show that albumen is a compound of cyan-alcohols united to a benzene nucleus. These cyan-alcohols have been prepared in the laboratory, with the exception of the lowest in the series $\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$, which requires *for its preparation formic* or methylic aldehyde, a substance which has not yet been obtained in a pure state. From the cyan-alcohols the corresponding amido-bodies, leucine, alamine, &c., have been artificially prepared. Judging from analogy, therefore, by treating the cyan-alcohol $\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$ with ammonia, we should form the cyanamide $\mathrm{CH_2}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{CN}\end{matrix}\right.$ which, hydrated with acids or alkalies, would form the amido-acid glycocine

$$\underset{\text{cyan-alcohol.}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.} + \mathrm{NH_3} = \underset{\text{cyanamide.}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{CN}\end{matrix}\right.} + \mathrm{H_2O}$$

$$\underset{\text{cyanamide.}}{\mathrm{CH_3}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{CN}\end{matrix}\right.} + 2\mathrm{H_2O} = \underset{\text{glycocine.}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{COOH}\end{matrix}\right.} + \mathrm{NH_3}$$

By referring to my paper you will see that it is also from the molecules of $\mathrm{CH_3}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$ attached to the benzene nucleus that I think creatine is derived; and that by changes in it and condensation, urea is formed, and the next cyan-alcohol higher in the series, $\mathrm{CH_2\,.\,CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$ by the hydration of which, as well as by the hydration of $\mathrm{CH_3\,.\,CH}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$ lactic acid would be formed.

$$\underset{\text{cyan-ethylic alcohol.}}{\mathrm{C_2H_4}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.} + 2\mathrm{H_2O} = \underset{\text{lactic acid.}}{\mathrm{C_2H_4}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{COOH}\end{matrix}\right.} + \mathrm{NH_3}$$

It is with this body $\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.$ that salicylic acid (as I would suggest) combines in its passage through the liver. If that substance were combined with cholic acid, we should have

$$\underset{\substack{\text{methene}\\ \text{cyan-alcohol.}}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.} + \underset{\substack{\text{cholic}\\ \text{acid.}}}{\mathrm{C_{24}H_{40}O_5}} = \underset{\substack{\text{glycocholic}\\ \text{acid.}}}{\mathrm{C_{26}H_{43}NO_6}};$$

and glycocholic acid acted upon by alkalies is converted into cholic acid and glycocine.

$$\underset{\text{glycholic acid.}}{\mathrm{C_{26}H_{43}NO_6}} + \mathrm{H_2O} = \underset{\text{cholic acid.}}{\mathrm{C_{24}H_{40}O_5}} + \underset{\text{glycerine.}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{NH_2}\\ \mathrm{COOH}\end{matrix}\right.}$$

Now, if salicylic acid, when it passes from the alimentary canal to the liver, combines with the cyan-alcohols, we should have

$$\underset{\substack{\text{methene}\\ \text{cyan-alcohol.}}}{\mathrm{CH_2}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN}\end{matrix}\right.} + \underset{\substack{\text{salicylic}\\ \text{acid.}}}{\mathrm{C_6H_4}\left\{\begin{matrix}\mathrm{OH}\\ \mathrm{COOH}\end{matrix}\right.} = \left.\begin{matrix}\mathrm{CH_2}\\ \mathrm{C_6H_4}\end{matrix}\right\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN\,.\,OH}\\ \mathrm{COOH}\end{matrix}$$

a formula of the same character as the molecules of living albumen. As this passes from the living tissue, the CNOH would be transformed into CONH, an imido-body, and the

$$\left.\begin{matrix}\mathrm{CH_2}\\ \mathrm{C_6H_4}\end{matrix}\right\{\begin{matrix}\mathrm{OH}\\ \mathrm{CN\,.\,OH}\\ \mathrm{COOH}\end{matrix} \text{ would become } \underset{\text{salicyluric acid.}}{\mathrm{CH_2(NH\,.\,C_7H_5O_2)COOH}}.$$

If the salicylic acid has a stronger affinity for the cyan-alcohol than cholic acid has, then the combination would prevent the formation of glycocholic acid, and therefore of glycocine, so that by the combination of salicylic acid in the liver, either with methene cyan-alcohol or by its conjugation with glycocine, as the latter is reabsorbed from the alimentary canal, the formation of uric acid in the system would be lessened. *(To be concluded.)*

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[3] See THE LANCET, vol. i., 1884, p. 485.

[4] Ibid., May 23rd, p. 933.

NOTES OF VISITS TO CONTREXÉVILLE AND ROYAT-LES-BAINS.[1]

BY F. R. CRUISE, M.D. UNIV. DUB.,
PRESIDENT OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS IN IRELAND.

MR. PRESIDENT AND GENTLEMEN,—It is well known to all physicians of experience that one of the most powerful agents we possess in the treatment of many chronic ailments is the use of mineral waters, especially when taken at their sources. However, if it be needful to prescribe the most efficacious drugs for each case we meet, it is no less important to select for each of our patients the mineral water best suited to his disease. To do this requires a somewhat special training and experience, not easily attainable. It is most important, both for patient and physician, that no mistake should be made in the choice, as a visit to a thermal station is not unfrequently a very laborious and expensive undertaking. For these reasons I venture to make the present communication to the Academy of Medicine in Ireland, in the hope of giving to others some information, derived from personal exeprience, of two celebrated French watering-places—namely, Contrexéville and Royat-les-Bains.

A brief history of the circumstances which led to my visiting Contrexéville in the year 1877 may add to the interest of the subject, and therefore I will relate it. Just fourteen years ago Sir George Porter and I attended a young lady (Miss M.) who suffered severely from chronic cystitis. The origin of the disease was obscure, but, from our knowledge of the patient's constitution, we inclined to the belief that a strumous diathesis was to blame. I regret to add that we failed to cure her. After some time Miss M.'s mother took her abroad, and while in Paris consulted the late Dr. Acosta about her case. Dr. Acosta recommended a visit to Contrexéville, and a course of the waters and baths there. His advice was followed, and the result was a perfect cure. I need hardly say that this rapid cure of so obstinate a disease, by a visit to a mineral water of which we had never even heard, made a very strong impression upon Sir George Porter and on me, and we resolved to profit by the experience. Before adverting to the many cases in which we advised a visit to Contrexéville, I may here record the fate of Miss M. A few years subsequent to her cure of cystitis she died suddenly. I learned that her death was preceded by very violent headaches. Although neither Sir George Porter nor I had attended Miss M. during the fatal illness, the family wished us to be present at the post-mortem examination, which was deemed advisable on account of her sudden and unexplained death. The examination showed that the cause of death was a large effusion of blood at the base of the brain. The membranes and adjacent cerebral substance were found extensively infiltrated with tubercular deposits. Sir George Porter and I felt anxious to ascertain the condition of the bladder, which had formerly been so much affected, and accordingly we examined it. As a result we found that organ and all its appendages, kidneys included, perfectly healthy.

Shortly after our favourable experience of the effects of Contrexéville in Miss M.'s case, Mr. C., an elderly gentleman of high position in the legal world, came under Sir George Porter's and my care. His case was one of chronic cystitis, the result of stricture and prostatic disease. The dilatation of the stricture gave but little relief to the cystitis and accompanying sufferings. So we advised him to go to Contrexéville. He went there two summers consecutively. His case was not a hopeful one for cure, but he derived very marked relief, and his life was evidently prolonged considerably.

The next case I shall allude to was that of a distinguished ecclesiastic, the President of one of the Provincial Colleges of Ireland, who suffered intensely from renal colic, cau by oxalate of lime gravel. His cure, accomplished by a visit of three weeks (in 1877), was complete and permane A similar case, in the person of a well-known and mu respected Dublin merchant, occurred (in 1883) within m own experience.

In the summer of 1882, Dr. James Little asked me to s a medical *confrère* (Dr. L.), who was quite broken down b chronic pyelitis. We decided to send him to Contrexévill where he derived much relief; and finding this cold, da climate unendurable, he emigrated to Australia, whence h sends me good accounts of his health and progress.

Without going into details of cases, it will be sufficient t state in brief that since I have known of Contrexéville have either sent there, or treated here with the import waters, most of the obstinate cases of irritable bladder o cystitis which have come into my hands, and that all ha derived benefit, and the more hopeful quite a satisfacto result. It so happens that my endoscopic studies hav brought under my care a large proportion of cases of urina disease, so that my experience has been somewhat extensiv When first I learned the therapeutic value of Contrexéville I sought in various directions for information concerning i and encountered much difficulty in my research. Althoug so celebrated in France and on the Continent, this watering place appeared unknown in England, and, with the exceptio of the brief notice of it in the French manual on miner waters by Dr. Constantine James of Paris, I could obtain no details. At last one of the patients whom I had sent thithe brought me two essays on the subject: one by the late Dr. Victor Baud, who had practised there for a quarter of a century, and another, more brief, by Dr. Tamin-Despalles, who was then in practice at these waters. More recently I have found an essay on the subject by Dr. Debout d'Estrées, the Government inspector of the station, which, on the whole, is the most satisfactory I know of.[2]

Wishing much to see Contrexéville, and urged to do so by Sir George Porter, I took an opportunity while at leisure in Paris, in the autumn of 1877, to run down there and make a personal visit. Taking the night mail from Paris by the Chemin de Fer de l'Est, I reached Neufchâteau, in the Vosges district, about six o'clock in the morning. Having breakfasted, I hired a *voiture* and drove to Contrexéville, a lovely drive of about fifteen miles, through a pretty mountainous country, not unlike our own county Wicklow. I may observe here that nowadays the train from Paris goes straight through to Contrexéville, making the journey shorter and easier than formerly. On my arrival I was most hospitably received by Dr. Tamin-Despalles, who showed me all that was to be seen, and explained the uses and effects of the waters. I regret much to say that this experienced practitioner has since died after a long attack of brain disease. His place is ably filled by several other physicians of eminence, amongst whom I may specially mention Dr. Debout D'Estrées, who has treated several patients I sent to him with judgment and success. I had the pleasure of making his personal acquaintance in the year 1883. To show how little was known of Contrexéville, except on the Continent, I may mention that Dr. Tamin-Despalles told me, in 1877, that so far as his knowledge went, and it extended over a long term of years, I was the first English-speaking physician who had ever visited it. Since that time it has come under marked notice, and has been visited by many of our Irish, English, and American *confrères*; however, as I have not seen any account of their visits in our language, I think a note of my experiences may interest the members of the Academy of Medicine in Ireland.

I found Contrexéville a pretty little town, or rather village, made up for the most part by the hotels and boarding-houses which accommodate the great influx of patients who come to it for the season from May until about Sept. 15th. In former days it belonged to the kingdom of Lorraine, but now it is in the department of the Vosges. Situated on the river Vair, in a valley open from north to south, it is placed at a height of over 1000 feet above the sea level. Its situation explains the sudden changes of temperature to which it is subject, especially in the morning and evening. This fact must be borne in mind by visitors, who should always be provided with woollen garments, even in the height of summer. Though the waters of Contrexéville have been locally celebrated time out of mind, they were only made known to the medical world in

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[1] Read before the Academy of Medicine in Ireland, May 29th, 1885.

[2] This guide book can now be had, in English, from Messrs. Churchill, of New Burlington-street.

1760, by a report read before the Society of Science and Arts of Nancy, by Dr. Bagard, physician to Stanislaus, King of Lorraine. A short extract from this quaint report will show that even at that distant time Contrexéville was resorted to by patients suffering from gravel, bladder diseases, gout, and liver complaints:—

"The mineral waters of Contrexéville are a sovereign remedy in diseases of the kidneys, of the ureter, of the bladder and the urethra, stone, gravel, glair, suppuration. We can assert that these waters are efficacious against the stone, which they loosen and drive out of the bladder, when the stone is not of a considerable size; that they dissolve and break larger stones, when the latter are chalky. We keep a list of patients of all ages who during several years have got rid of a stone through the effect of these waters. They prevent fresh attacks of gout by restoring the suppleness of the nerves, and of the membranous parts which the disease has dried up. As these waters contain ferruginous matter, a mineral acid and soap, they will be very useful in cases where the bile becomes too thick, and where the liver is obstructed—the more so as they are purgative."

Dating from the time of Dr. Bagard's report, we find the celebrity of Contrexéville steadily growing. Analysis upon analysis has been made of the waters—the Government has taken the station under its protection. Capitalists have expended large sums in making the place attractive to visitors, and year by year the number of these visitors has increased, so that now, owing to the crowds, it is necessary to secure accommodation in advance before venturing to undertake the journey. The accommodation at present is quite first-rate. There are capital hotels and boarding-houses to suit various means; also a well-regulated *établissement* for baths, douches, &c., a very pretty park, with suitable amusements, Casino, theatre, covered promenades, music, reading-rooms, &c. It is right to add that travellers who seek amusement alone are likely to be disappointed. The place is remote and somewhat dull, the patients who go there not young or lively; but the cures are numerous and remarkable, and the patients generally very well satisfied. I was greatly struck in observing the wisdom of the French Executive, which, like all other Continental Governments, takes under its guardianship all places possessing mineral waters of value, developing their utility, and doing full justice to their virtues and capabilities; a contrast very humiliating to anyone familiar with the neglect exhibited by our Government towards places similarly gifted in Great Britain and Ireland.

Contrexéville is prettily situated in the heart of the Vosges mountains, surrounded by agreeable walks and drives, and within easy reach of many interesting places. Amongst others I may mention Domrémy, the birthplace of Joan of Arc; Mirecourt, a flourishing town, celebrated for the manufacture of musical instruments; Neufchâteau, the valleys of Viviers and Bonneval, the baths of Plombières, and similar places. Trips to these various resorts pleasantly fill in the leisure hours of the patients staying at Contrexéville.

As already mentioned, I visited the different springs, and ascertained their properties. Four principal springs are used, which I name in the order of their importance—namely, the Pavilion, the Prince, the Quay, the Sovereign. A fifth, named Le Cler, is also used, and its water exported, but it is weak compared with the Pavilion. All these springs are cold. The Pavilion may be taken as the typical and most important water. I give here a table, showing the result of M. Debray's analysis.

Analysis of the Pavilion Water.

Free carbonic acid	0·080
Bicarbonate of lime	0·402
„ magnesia	0·035
„ iron	0·007
„ lithium	0·004
Sulphate of lime	1·165
„ soda	0·236
„ magnesia	0·030
Silica	0·015
Chloride of potassium	0·006
„ sodium	0·004
Fluoride of calcium	traces
Arsenic	traces
	2·384

While we may take the Pavilion water as the most important and typical in its composition and effects, it is right to observe that the other springs are similar, on the whole, with some variations. Thus the Prince is richer in iron, and hence of great repute in the treatment of anæmia and diseases of females. According to Dr. Victor Baud it is specially efficacious in functional sterility. The Quay Spring contains more magnesia, and is particularly suited to the gouty. The Sovereign is much weaker than the others, and contains no iron, or at all events none worth notice. Le Cler resembles the Pavilion, but is weaker. I draw attention to this fact as it is now imported, but it is by no means as efficacious as the Pavilion. It is very important to observe that these waters bear carriage well, the only difference observable in the analysis made at the springs and after importation is that the latter show a certain falling off in strength.

My friend Dr. Tichborne, who has lately brought out an important work on mineral waters, in conjunction with Dr. Prosser James of London, was kind enough, two years ago, to place in my hands the results of his analysis of the imported waters of Contrexéville. According to his researches the solid constituents of the imported water amount to 166·7 grains per gallon, as against 229·5 found in the water fresh from the spring. Le Cler water shows only 149 grains per gallon.

It will be seen from the foregoing analysis that the spring belongs to the class of calcareo-sulphated waters—that it is alkaline, with a preponderance of salts of lime, that it contains aperient salines in the form of sulphates of soda and magnesia, also iron and arsenic, and traces of fluoride of calcium. It holds, moreover, sufficient free carbonic acid to make it bright and pleasant to the taste, when fresh from the source, thus masking its somewhat inky flavour. Its effects, when used internally, may be anticipated. It is, first, diuretic; secondly, laxative; and, thirdly, tonic. When taken in suitable doses it purges gently, improves the appetite, stimulates the circulation and skin, promotes the flow of bile, and especially it increases the urinary secretion in a very remarkable manner.

It is upon the urinary organs that the water of Contrexéville exercises the most powerful effect. It acts rapidly, producing a diuresis far in excess of the quantity of fluid ingested; it dissolves the mucus met with in the passages, and loosens and carries out small concretions. It has been observed to subdue quickly excessive acidity of the urine, clearing it remarkably of deposits, and, strange to say, in certain cases it is found to restore alkaline urine to its normal acidity. This seemingly paradoxical effect is due to its efficacy in curing morbid conditions of the urinary mucous membranes, which so often lead to ammoniacal decomposition, and consequent alkalinity of the urine. Its effects in cases of gravel and stone are remarkable. When the calculi are small, they are frequently washed out bodily by the diuresis. When large and soft, they are disintegrated and broken up to such an extent that some actual cures have been recorded; but the more common effect of Contrexéville water on large calculi is to strip them of mucous and phospahtic coatings, thus exposing the central calculus in its rough outline, and increasing the calculous symptoms. In this way the waters act as a valuable test, quickly revealing the presence of the stone, and compelling the patient to seek surgical aid, and waste no time in hesitancy, the too frequent result of procrastination, due to the fluctuation of symptoms. In cystitis, whether essential or symptomatic, the waters of Contrexéville are useful beyond all controversy, often curing the former, and mostly alleviating the latter cases, even when all other remedies have failed. I can speak with confidence on this subject, from an experience extending over fourteen years. The highest Continental authorities are agreed upon the therapeutic value of Contrexéville waters in urinary diseases. As I stated before, my knowledge of their utility arose from Dr. Acosta of Paris sending thither a case which had long resisted other treatment, and both the late Dr. Civiale, a specialist of European fame and historical celebrity, and Dr. Durand-Fardel, another specialist on the subject of mineral waters, speak in the highest praise of them. Dr. Civiale particularly advised their use in cases of atony of the bladder, arising from long-standing stricture, cystitis, and following the operation of lithotrity.

The essential difference observable between the Contrexéville waters and those of other alkaline sources, such as Vichy, Vals, and so forth, is that they are tonic, and thus, while beneficial to the local ailments, are, at the same time, restorative of the general health and strength. Such a combination of virtues cannot, by any means, be affirmed regarding many other alkaline waters.

Besides their internal administration, the waters of Contrexéville are also used externally in baths, douches, &c. I have some doubts of their possessing any very powerful effect when applied to the skin, except perhaps as a stimulant in douches, and thus an adjuvant to their internal exhibition; all the more so, as I observed at the time of my visit that the waters, when heated, freely deposit the solid ingredients, lining the boilers with thick incrustations.

Although my principal object in this paper is to explain the value of the waters of Contrexéville in diseases of the urinary organs, I may be allowed to notice briefly their utility in some other ailments.

First, in gout these waters will be found most serviceable especially in the chronic or atonic forms. This might be anticipated from their usefulness in calculous disorders, which are largely due to gout. In them we find properties at once diuretic, laxative, and tonic, fulfilling the most important indications for treatment. Moreover, being moderate in the degree of their mineralisation, they are much safer, especially for the weakly, than the waters of Vichy, Vals, Carlsbad, and other more powerful alkaline spas, which suit best for the plethoric. Trousseau, as also Charcot, dwells on this point in favour of Contrexéville.

Another class of cases in which these waters are found particularly useful are those in which the liver is congested and inactive from one cause or other, and the bile inspissated and tending to the deposition of concretions or gall-stones. Numbers of patients thus affected are sent by the French physicians to this station, and obtain remarkably favourable results. This, as in the case of gout, is just what we might expect from the composition and effects of the waters.

Another ailment in which Contrexéville waters are used with advantage is nocturnal incontinence of urine in children. I can speak decisively on this point from my own experience. I believe that in such cases the action of the water is twofold. In the first place, it corrects irritating conditions of the urine, and secondly, it restores tone to the organs. Whether this is the correct explanation or not, of one thing I am certain, that the use of the Pavilion water, as a diet drink, has cured a number of very obstinate cases.

Another disease in which Contrexéville water has been found very serviceable is diabetes. I do not mean to affirm that it will accomplish the cure of confirmed cases of diabetes with progressive wasting, but certainly in the group of patients who are gouty, and more or less diabetic, it materially reduces the glycosuria, and proves a useful adjunct to a regulated dietary. In this effect it closely resembles the famous American mineral water, the Bethesda.

To recapitulate: the waters of Contrexéville are mildly alkaline, especially from lime salts; saline, from sulphates of soda and magnesia; tonic, being ferruginous and arsenical, with traces of fluoride of calcium.

The diseases in which they prove useful are: Chronic affections of the urinary organs, especially when complicated by gravel, renal or vesical; gout, especially its atonic forms, the waters being tonic, and thus markedly contrasting with many other alkaline waters; diseases of the liver, especially those complicated by gall-stones; nocturnal enuresis in children; and diabetes, especially when associated with gout.

Let me add a word as to the use of the imported waters of Contrexéville. I advise the Pavilion spring, and none other. Of this I give half a bottle daily as a diet drink, either with milk, wine, or spirit, as otherwise indicated. Watching the effect I increase the quantity up to a whole bottle, but have not exceeded that amount. As to the method of using these waters at the Springs, I do *not touch* the subject. Taken fresh they are far too powerful to be used without the regular supervision of a physician familiar with their employment. Under such direction I believe they will be found an invaluable adjunct to the resources of the practical physician and surgeon.

(*To be concluded.*)

TAUNTON SANITARY HOSPITAL.—An honorarium of [illegible] guineas has been presented to the medical officer (Dr. [illegible]) and one of 30 guineas to the matron (Miss [illegible]) of this institution, for their services during the recent outbreak of small-pox, when 171 cases were admitted into the hospital. The salary of each has also been raised [illegible] £5 per annum respectively.

OVARIOTOMY IN ROME.

BY J. HARRY THOMPSON, A.M., M.D.

THE following report is made on account of several points of unusual interest connected with the case before and after the operation.

Marguirata M——, Italian, aged twenty-seven years, consulted me for the first time in February, 1882, and gave the following history. She was married in October, 1879. Her first child was born ten months after; her labour was natural and convalescence perfect. A few months after the birth of her child she noticed a tumour in the left iliac fossa about the size of an orange. At first she experienced no discomfort from it, but latterly the tumour had increased rapidly, and was the seat of repeated attacks of severe pain, accompained by fever. For several weeks respiration had been rapid and difficult; she was unable to lie down, but slept in a half-sitting position. She stated that she had consulted several physicians, who had expressed the opinion that she was suffering from a uterine myoma, and advised her not to submit to any operation. Her general appearance was that of a woman about forty years of age, skin sallow, face haggard and indicative of bodily suffering. The abdomen was enormously enlarged, measuring forty-nine inches around the umbilicus, the feet and legs were œdematous, pulse 118, temperature *normal*. The tumour was regular in outline, very hard, and the fluid wave indistinct; but a careful examination satisfied me that she was suffering from cystic disease of the ovary. I advised her to submit to the operation for radical cure, but to this neither she nor her husband would consent. It was only after much persuasion that she would consent to be tapped. On Feb. 23rd the tumour was aspirated with a large-sized cannula, and forty-seven pounds of reddish-brown grumous fluid withdrawn. The operation was followed by no constitutional disturbance.

The patient gained flesh and strength rapidly, and at the end of one month was apparently in perfect health. She had lost the aged and worn expression so strongly marked when she first came under observation. She presented herself occasionally for examination, having been advised that in all probability the fluid would reaccumulate, in which event it would be necessary to remove the tumour before it should again seriously impair her health. It was not until the end of May that I detected the sac to be refilling.

In August I received a letter from her husband stating that she was nearly as large as before the tapping, and suffering much pain and inconvenience, and was very anxious for the operation to be performed. I was then at Viareggio on the Mediterranean, where there is an excellent hospital under the charge of a Catholic sisterhood. I sent for her to come immediately, with the intention of placing her there for the operation. In a few days she arrived, and, to my surprise, I found that she was nearly five months advanced in pregnancy. She was larger than most women at full term. The situation was critical and embarrassing. If the pregnancy went on, the sac would in all probability be ruptured. To attempt to relieve her by tapping would be very hazardous, as, owing to the thickness of the abdominal walls, it was impossible to define the outlines of the tumour or uterus. She was fully advised of the situation, and the induction of premature labour was recommended as being the safest procedure under the circumstances. This suggestion was acceded to, and on August 31st a fine piece of carbolised catgut was introduced into the uterus and left there. In forty-eight hours labour pains were strong and the os well dilated, and she was safely delivered of a male fœtus on September 3rd. In two weeks from the time of delivery she felt so well and was so much reduced in size that she would not consent to the operation. She returned to Rome in the latter part of the month, promising me that she would not again expose herself to the danger from which she had escaped.

I saw her again in November. The tumour was large, but gave her little inconvenience; her general health was good, and continued so until February, 1884. At this time her abdomen was as large as when she first came under observation. It was then arranged that the operation should be performed one week after the termination of her next menstrual period. The results of ovariotomy in Rome had been so generally fatal that I was particularly anxious to protect my patient from any possible source of contamination. An apartment was secured on the top floor of a new palace, where there was abundance of pure air and sunshine. The furniture, which had never been used, was limited to absolute necessaries, and everything made thoroughly aseptic. On March 20th she was removed to her new quarters, and placed in the charge of a trained nurse from St. Paul's Home. The patient's diet for three days before the operation was confined to Scotch oatmeal with cream for breakfast and supper, and broiled beefsteak and bread for dinner, with a glass of claret.

I performed the operation on March 24th, 1884. Dr. Drummond administered the anæsthetic (Billroth's compound of ether, chloroform, and alcohol), and I was ably assisted by Professor Pantaleoni, Dr. Bull, and Dr. Georgiana. I made an incision over the linea alba, one inch below the umbilicus and extending downwards five inches. The abdominal wall was unusually thick and very vascular. Eighteen ligatures were applied before the hæmorrhage was controlled. Upon dividing the peritoneum, the tumour as far as the hand could reach was found to be strongly adherent over all except the lower anterior part. To secure working room, it was necessary to extend the incision three inches above the umbilicus. Adhesions which would readily yield were broken down by the finger, and the sac was tapped with Spencer Wells' trocar. Unfortunately, the rubber tube running from the trocar was bent upon itself, and before it could be straightened some of the contents of the sac escaped into the peritoneal cavity. The omentum was largely adherent; it was tied in six parts, the ligatures cut short, and the omentum divided. The separation of the adhesions about the umbilicus was difficult and tedious, and much time was occupied in this part of the operation. The abdominal wall and the wall of the sac were so intimately incorporated that it was found impossible to separate them with the finger and handle of the scalpel, and a careful dissection had to be made with the knife, a portion of the wall of the sac being left adherent to the abdominal wall. The bleeding was profuse. The larger vessels were ligatured with fine carbolised silk, and the ends of the ligatures cut off short; the remainder were twisted, and the oozing points touched with Paquelin's cautery. The pedicle was broad and very vascular; Sir Spencer Wells' clamp was applied, and the stump thoroughly cauterised and dropped back. The abdominal cavity was then carefully cleansed from blood and cystic fluid, and I was about to close the wound when the stump was discovered to be bleeding freely. Fortunately, it was easily found and secured by a double ligature of stout carbolised silk, the ends of which were left outside. The cavity was again sponged out, and the wound closed by thirteen sutures of stout silver wire. The abdominal walls were loaded with fat, being nearly three inches thick; the sutures were made to include one inch of peritoneum on either side. The ends of the ligatures from the stump were brought out at the lower angle of the wound by the side of an half-inch rubber drainage-tube, which was passed down to Douglas' cul-de-sac, and secured by a large-sized safety pin. Lister's dressings were applied, and over all a many-tailed flannel bandage. When the patient was placed in bed the pulse was scarcely perceptible, and the temperature marked 97°. Bottles of hot water were applied to the feet, hands, and sides of the body, and brandy administered hypodermically. She had been under the continuous influence of the anæsthetic for three hours, and the peritoneal cavity was open and exposed to the carbolic spray for nearly the same time. By 8 P.M. reaction was well established. Pulse 112; temperature 99°. She complained of pain at the site of the wound and thirst. The catheter was passed, but there was no urine in the bladder. Half a grain of the watery extract of opium was ordered to be given every four hours, if the pain continued or the patient became restless, and ice to allay the thirst.

March 25th.—6 A.M.: Has passed a restless night, but has less pain. Pulse 112; temperature 98°. One ounce of dark-brown urine has been drawn during the night. 4 P.M.: Complains of dull pain in the head and much thirst. No urine in bladder. Ordered four ounces of effervescing lithia water to be taken every four hours, iced milk in small quantities, and opium to be continued if necessary.

26th.—10 A.M.: Pulse 110; temperature 100·2°. Tongue clean and moist; has passed a quiet night; feels tired, but has little pain. The dressings, being soiled, were removed under the spray, and the part redressed. The wound looked well, the edges being united. Light-brown serum was flowing freely through the tube and by the side of the ligatures. During the night about two ounces of olive-green urine had been drawn by the nurse. 9 P.M.: Pulse 104; temperature 99·6°. The urine drawn during the day was of the same character, and about three ounces and a half in quantity.

27th.—10 A.M.: Pulse 110; temperature 99°. The patient looks well, says she feels better, has no pain about the abdomen, but her head feels queer. Three ounces of bloody urine had been drawn during the night. The bandages and pad under her were soaked with serum, slightly discoloured but odourless. Fresh dressings were applied under the spray. Lithia water to be continued, iced milk for nourishment, and no opium to be given unless the patient should be restless. 10 P.M.: Pulse 100; temperature 98·5°. The patient sleeping. About four ounces and a half of urine had been drawn since morning visit, and still some blood in it.

28th.—11 A.M.: Pulse 100; temperature 98·5°. The patient quite cheerful. She has passed five ounces of urine during the night without blood, and much lighter in colour. The flow of serum continues very abundant. Fresh dressings were applied. Lithia water to be continued, and for nourishment milk and beef essence alternately. No night visit made.

29th.—9 A.M.: Pulse 104; temperature 98·2°. Patient looks anxious, complains of pain all over the abdomen, which is much distended. On removing the bandages I found them but little soiled, and no serum flowing from the tube, and but little by the side of the ligatures. Upon withdrawing the tube, which was blocked with blood-clots, the serum spouted from the opening in a steady stream, carrying with it numbers of small clots. After the flow of serum had stopped, a shorter tube was introduced and fresh dressings applied. 4 P.M: Pulse 104; temperature 98°. Patient is much easier, serum flowing freely. The nurse had drawn four ounces of urine, of a more natural appearance.

30th.—Noon: Pulse 100; temperature 98°: Patient is doing well; feels a desire for food. Bandages, pad, and bed soaked with serum. Every alternate suture was removed, and strips of adhesive plaster applied in their places. Raw eggs were ordered to be given in the beef essence, and some toasted bread allowed. Lithia water discontinued.

31st.—2 P.M.: Pulse 96; temperature 98·1°. During the last forty-eight hours the patient has passed, without the use of the catheter, nine ounces and a half of urine, natural in colour.

April 1st.—10 A.M.: Pulse 96; temperature 99·6°. The patient says she feels quite well. The remaining sutures were removed. Union was perfect. The abdominal wall was firmly supported by wide strips of adhesive plaster. The drainage-tube was removed, the ligatures being sufficient to keep the opening patent.

From this time onward the patient progressed towards recovery without one bad symptom. Occasionally there would be a slight elevation of temperature and an increase in the heart's action, but at no time sufficient to cause anxiety or necessitate treatment. The bowels were not moved until the sixteenth day, and then under the combined action of castor oil internally and repeated injections of tepid water. One month from the day of the operation she returned home. The abdominal opening was still patent and the ligatures firm. In accordance with the suggestion of Sir Spencer Wells, gentle continuous traction was kept on the ligatures by means of a rubber ring, to one side of which the ligatures were attached and the other side made fast to the abdominal wall by strips of adhesive plaster. At the end of eleven weeks they showed no signs of yielding. The continual traction was making the part sore, so I determined to cut them off. I drew them out as far as I could without using too much violence, and pressing the abdominal wall inwards cut them off as short as possible. Undoubtedly the attached portions of the ligatures were encysted. In a few days the opening closed and the patient needed no further treatment.

Throughout the treatment of this case the strictest antiseptic precautions were observed. Neither of the gentlemen who assisted me or the nurse had attended a case of fever or been in contact with any contagious disease for two weeks. Instruments, sponges, towels, and everything used were rendered thoroughly aseptic, and no one but Dr. Bull, myself, and the nurse were permitted to enter the room for ten days after the operation. One might naturally have expected that after so much violence had been done to the peritoneum some inflammation would have followed. There were twenty-three ligatures cut off short and left in the peritoneal cavity, and the stout ligatures around the pedicle, and eighteen ligatures cut off short and left embedded in the abdominal wall. The escape of so much cystic fluid into the abdominal cavity increased the risk, for, however carefully the cavity might be sponged, some portion would surely remain; but during the whole progress of the case the highest point of temperature reached was 100·2°, and the pulse never exceeded 116. A large amount of carbolic acid was necessarily absorbed during the operation; it undoubtedly caused some renal congestion and partial arrest for some days of the renal secretion; but, on the whole, it did much more good than harm, for I am firmly convinced that had not the strictest Listerism been observed in the treatment of this case, I should have lost my patient.

Rome.

CASE OF STARVATION AND SUSPENDED ANIMATION.

BY EDWARD BERDOE, M.R.C.S., L.R.C.P. EDIN.

I WAS called on April 29th, 1885, by an order from the relieving officer of my district, to see a man named Samuel B——, aged seventy-four, at the almshouses of the Parmiter Charity, Bethnal-green. I found him lying on the floor insensible and dying. His wife sat near him, and on being questioned admitted that he had been lying in the same position for six days without food, drink, or any attention whatever. It was only by information from a neighbour that the parish authorities got to know of it. On raising him to place him on the bed, part of the flesh of his face adhered to the floor and was torn off. The exact form of the patient was marked on the floor by the exudation from the skin. He was in a most filthy state, and though unable to swallow even liquids, lived about fourteen hours after my first visit. By the coroner's order I made a post-mortem examination. The body was fearfully emaciated, and all the parts that had been in contact with the floor were gangrenous. The organs presented the usual appearances of death from starvation, but the medical interest of the case was found in the condition of the heart. This was enormously hypertrophied and dilated; all the vessels were atheromatous, and there was a large aneurysm of the arch of the aorta. The cardiac condition seemed to satisfactorily clear up some of the difficulties of the case. From the evidence at the inquest it is probable that the wife's statement was correct, that he had fallen down "in a fainting fit" six days previous to my visit, and had not moved or spoken since. The heart presumably beat with just sufficient force to keep the respiratory organs going; this was, of course, favoured by the recumbent position. The case is interesting from a medico-legal point of view, as showing how long a person may live in a state of syncope.

Victoria-park-gate, E.

A NEW SPLINT FOR THE TREATMENT OF COMPOUND INJURIES AT OR ABOUT THE ELBOW-JOINT.

BY ROBERT JONES, M.R.C.S.,

[illegible] ASSISTANT-SURGEON, STANLEY HOSPITAL, LIVERPOOL.

I HAVE found the annexed figured splints very useful among the out-patients of the Stanley Hospital. One form (Figs. 1 and 2) is composed of two very flexible sheet-iron [illegible] covered with felt, and connected by means of a [illegible] rod, so twisted as to extend beyond the elbow. It thus gives ample freedom for easy change of dressings, without interfering with the immobility of the joint. This is of great advantage where perfect rest and free drainage are required. For comfort's sake the forearm support is extended beyond the wrist—a detail which should on no account be neglected. The connecting bar must be sufficiently strong to admit of no movement at the elbow. Where the wound is unusually large and extends up the arm, I use a modified splint (Figs. 3 and 4), the flexible sheet-iron support being substituted by small wings, which are quite easily bent and can be moulded to the arm without any trouble. The splint is made at any angle which the surgeon, regardful of the possibility of ankylosis, may suggest. This will vary according to the patient's vocation. Generally speaking, a right angle gives the most useful result.

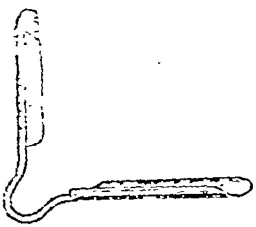
FIG 1

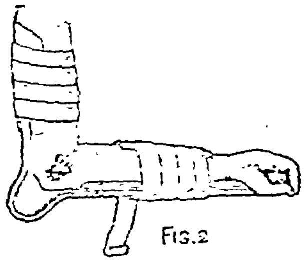
FIG. 2

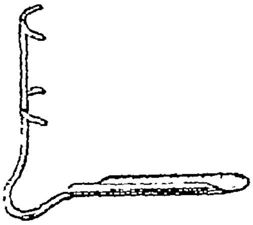
FIG. 3.

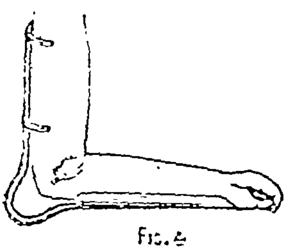
FIG. 4

The splints may be procured at a moderate cost from Messrs. Krohne and Sesemann, London; and from Mr. J. Critchley, Upper Pitt-street, Liverpool.

Liverpool.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

> Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.

KING'S COLLEGE HOSPITAL.

A CASE OF EMBOLISM OF THE RIGHT MIDDLE CEREBRAL ARTERY SIMULTANEOUSLY WITH EMBOLISM OF THE RIGHT BRACHIAL: GANGRENE OF THE RIGHT THUMB AND LITTLE FINGER: RECOVERY.

(Under the care of Dr. JOHNSON.)

IT is rare to have embolism of a cerebral vessel and simultaneous embolism of one of the large systemic arteries. The most common source of such embolism is the detachment of granulations from one of the valves on the left side of the heart. This condition of the valves is usually accompanied by a murmur or other indication of the disease, but it is possible to have disease sufficient to produce embolism of more than one vessel without any murmur. Under such circumstances, until a post-mortem examination has been made, such source cannot be decidedly negatived.

For the following notes we are indebted to Mr. T. Sydney Short, medical registrar.

E. W——, aged thirty-nine years, was brought in by his wife, and carried on an ambulance stretcher. He could answer questions, but was incoherent and dazed. His wife said that on the night of March 11th, seventeen days before his admission, which took place on March 28th, he had a fit when apparently asleep, and she found him out of bed and trying to get into bed again. He was completely dazed, and could only just understand what was said to him. She noticed that he had lost the use of his left arm, and that the face was drawn to the right side; and on attempting to feel the pulse could not obtain any beat on the right side at the wrist, but easily felt it on the left side. The forearm and hand were quite cold on the right side, and she also noticed that as they became warmer the end of the little finger and the thumb became black. The paralysis of the left leg came on more gradually, and was complete in a few days. For a day or two after the seizure he had some incontinence of urine, which then passed off. As far as she could say, the sensation of the left side was lost from the first. His memory for all events just before and at the time of the attack was very dim, and although his speech was thick there was no aphasia.

The patient was a healthy-looking and well-made man, with perfectly white hair, which, it was stated, had turned so when he was nineteen years of age; this and a large black beard made him look much older than thirty-nine years. It appeared that from the early part of the year he had been overworked as a clerk, and, besides being very anxious about his work, had been doing some hours overtime. One day he had fainted, for the first time in his life, from sheer fatigue. His family history was good. His parents were both alive, and his mother was getting about fairly well, in spite of a paralytic stroke when sixty years old. He himself had a good history. He had had scarlatina eighteen years ago, but never any rheumatism, and never suffered from anything except from an occasional severe headache when especially worried.

On admission, he had complete paralysis of the left arm and leg, with partial left facial paralysis; on the same side there was total loss of sensation to touch, but he could feel pain as such, not, however, being able to localise it at all. The whole of the paralysed side was bathed in perspiration. At about the junction of the upper with the middle third of the right upper arm a soft plug could be distinctly felt in the brachial artery; there was a pulse above this point, but none below. The greater part of the thumb and the end of the little finger were black and shrunken, and the line of demarcation had commenced in both. There was no evidence of past or present cardiac mischief. The urine was at first passed unconsciously, was ammoniacal, but contained no albumen. Arteries not rigid nor thickened. During the first week his temperature was rather above the normal. He soon regained command over his bladder and moved his left leg slightly. The right hand caused him a great deal of pain, and was relieved by opium fomentations. It was found he could not detect the difference between hot and cold substances, unless they caused pain. For about a month he was sleepy and dull. The progress of the case was briefly as follows:—During April and May he steadily improved, his mind became clearer, and the movement of the left leg increased. On May 7th he was seen by Sir Joseph Lister, and the gangrenous parts were dressed with salicylic wool and bathed daily with a carbolic acid lotion from that day. Rigidity in the paralysed limbs gradually showed itself, and tendency to ankle-clonus was seen during June, and became well marked in July. The sensation of the face improved rapidly, but that of the limbs was absent for touch at this time. On Sept. 12th, and again on Nov. 14th, he had an epileptiform fit; the spasms were most marked on the right side, but commenced on the left, and he was reported to have moved his head towards the right side. The rigidity in the meantime was gradually increasing, and a wrist-clonus was developing on the left side. During January of 1885 he had two more fits, both beginning with left-sided twitchings. The second one was preceded by much headache, and was the last fit he had in the hospital. At the end of January he could not stand on account of his left leg giving way at the knee and ankle; none of the muscles had wasted. The left knee-jerk was only slightly in excess of the right, and the attempt brought on convulsive movements of the leg. Ankle- and wrist-clonus and elbow-jerk were easily obtainable. No abnormal sensations anywhere. Sensation to touch still much impaired in the left limbs, especially in the foot and hand, and improving in passing upwards along the limb from these parts, enabling him to appreciate the difference between heat and cold, which he was unable to do in the hand and foot. He could tell the difference between a knife point and pencil anywhere. The sensation over the left side was nearly normal, being slightly duller than the other. The rigidity is worse after any movement of the limbs, but he thinks himself it is much less. The gangrenous part of the thumb was removed by Sir Joseph Lister on Aug. 15th, and on Oct. 30th the end of the little finger was removed. Both places healed up perfectly, leaving him with a small piece, about half an inch, of metacarpal bone of the thumb projecting, with fair movement; he had an artificial thumb fitted to this.

The patient was discharged on May 1st, 1885; and on June 3rd he wrote the following account of himself with the help of the artificial thumb. He is still unable to stand and thinks there is no increase in the power of the left arm and leg, but that the stiffness in both limbs has decreased. He has had no more fits, but could send no information about the pulse on the right side.

Remarks by Dr. Johnson.—The chief points of interest in this case are the simultaneous occurrence of the left hemiplegia and the embolus in the right brachial artery, making the diagnosis of hemiplegia from embolism almost certain. At the same time there was no clue as to the origin of the embolus, and the point whence it had originally started could not even be guessed at, since the heart was normal as far as could be ascertained.

KENSINGTON INFIRMARY.

A CASE OF OVARIOTOMY; RECOVERY; REMARKS.

(Under the care of Mr. H. P. Potter, Medical Superintendent.)

The patient was a single woman, aged fifty; the catamenia were regular; the duration of the swelling two years. This was situated to the right of the umbilicus; it was globular, smooth, and fluctuating with distinct thrill, measuring five inches in diameter. Potin's aspirator evacuated nearly three pints of clear, limpid albuminous fluid, sp. gr. 1010. This was done eight weeks before the operation. On March 27th, as the fluid had re-collected and the cyst appeared tense, ether was given and an incision three inches long was made immediately below the umbilicus and the cyst exposed. This was found to have many adhesions to the surrounding parts—viz., to the abdominal wall, intestine, and mesentery. All these were torn away, excepting two firm adherent cords which required ligature. The bleeding was so slight that no vessel was tied or twisted. Limpid, dark-coloured fluid was drawn off; a small quantity escaped into the peritoneal cavity. The pedicle was secured with a double stout silk ligature and the collapsed cyst withdrawn from the abdomen. It was unilocular and connected with the right parovarium. Four deep silk sutures were introduced from within outwards, and five superficial catgut stitches joined the edges of the incision, which was covered with antiseptic gauze. Drs. Travers and Atkinson assisted at the operation. Ice-water was alone given for twenty-four hours. The patient had a little vomiting (due to the ether). The temperature on one occasion rose to 99·3°F., with this exception it was normal throughout, and the progress during convalescence was undisturbed. The patient left her bed on the fourteenth day, and gradually regained strength until April 21st, when she was certified for a convalescent home.

Remarks by Mr. Potter.—The importance of rest following capital operations is fully recognised. And in no operation are rest and position more necessary than in ovariotomy. Although this case is by no means peculiar, the special feature I wish to point out shows and tends to prove that in some complicated cases, at any rate, absolute and continuous rest in the horizontal dorsal position and the prohibition of movement, however slight, favours early cicatrisation, and counteracts peritonitis and other serious sequelæ. Mortality after ovariotomy is influenced by the severity of local conditions, the state of the kidneys and other viscera, the health, disposition, and temperament of the patient, the care with which she is prepared, the after-treatment, and nursing. These points are doubtless more worthy of consideration than age, size of tumour, mechanical effects of the swelling, variety of the dressing, and the presence or otherwise of strict antiseptic precautions. In conclusion, I venture to think the instrument usually employed for tapping these cysts is too large, especially in cases where the contained fluid is known to be limpid; it is apt to make a rent in the cyst-wall through which fluid may escape by the side of the cannula. It is found in practice that the abdomen can invariably be emptied in ascites with the pocket-case trocar and cannula. If some material could be found to adhere to the cyst so that the fluid may be carried away clear of the abdomen during the process of tapping, similar to the impervious apron which is commonly applied in these operations to the skin of the abdomen, I apprehend that by the prevention of the escape of fluid into the abdominal cavity, we should obviate a risk against which we have at present no infallible remedy.

ROYAL SOUTHERN HOSPITAL, LIVERPOOL.

CASES OF STRICTURE OF THE URETHRA, WITH COMPLICATIONS; REMARKS.

(Under the care of Mr. PAUL.)

THE cases of stricture of the urethra which we publish are of interest, each of them being complicated and requiring special treatment. Wheelhouse's operation, which was performed in one case, was described by him in 1876; but, as Mr. Paul observes, it is not necessary to use the special instruments then brought forward, success being equally obtained with instruments which are in almost daily use.

CASE 1. *Old Stricture; Perineal Abscess; Urinary Fistula, becoming epitheliomatous.*—Josiah C——, aged fifty-four, a seaman, had suffered many years from stricture (he says thirty), but had never been treated for it. He sought admission on account of a perineal abscess. Under ether the abscess was opened, the stricture divided, and a full-sized gum-elastic catheter passed and tied in. On the third day the catheter came out and was not reintroduced, a Lister's bougie being passed daily instead. At the end of two months he was discharged almost well, but warned to attend as an out-patient for some time to get the bougie passed, as the stricture showed a strong tendency to contract again. He was an extremely nervous man, and once out of the hospital had not the pluck to continue treatment, the result being that in the course of a few months he had another urinary abscess worse than the first. He kept away from the hospital until he found that he was getting in a very bad way, when he returned in the following condition: the scrotum and the whole of the perineum and neighbouring parts were brawny and tender. Just behind the former was a ragged, foul-smelling sore, eating deeply into the perineum along the tract of the original fistula. Its edges were hard and epitheliomatous in appearance, and upon scraping the surface of the sore the characteristic "nest cells" were found in abundance. The disease was too far advanced to permit of any attempt at removal, and came to a fatal end in about three months, the actual cause of death being cellulitis. At the post-mortem the growth was found to be limited to the perineum and neighbouring glands, involving all the parts down to the arch of the pubis and spreading freely into the scrotum. The prostate and bladder were quite free.

Remarks by Mr. PAUL.—I believe that this is a very rare sequence to a urinary fistula, and it is very unfortunate that there were no means by which the exact origin of the epithelioma could be determined. It is difficult to distinguish microscopically epithelioma of the bladder from epithelioma of the skin, and the same holds good with the urethra. The whole case lasted only ten months. When first seen, the skin of the perineum was unbroken, it was quite free from growth two months later, and then, at the end of another five months, was the site of a large and very deep epithelioma. Under these circumstances, I inclined to the opinion that the growth commenced in the urethra, and was excited by the prolonged stricture; just as simple syphilitic stricture of the œsophagus sometimes ends in epithelioma of that structure.

CASE 2. *Stricture; Cystitis; Wheelhouse's Operation.*—James P——, aged thirty-four, had gonorrhœa when a lad and had suffered from stricture for the last sixteen years. He had often been under treatment at the various hospitals in the town, but had never had anything larger than a No. 6 or 7 passed except on one occasion when Mr. Harrison ruptured the stricture with Holt's dilator. After this he learnt to pass a catheter for himself, but had only used the smaller [illegible], and came to the hospital, as he could get nothing more in, and was scarcely able to pass his urine. On admission he was in good general health. There was a cartilaginous stricture in the perineum which would just admit the smallest soft bougie. The urine was foul and contained a quantity of mucus. At the end of three days no dilatation had been effected with catheterism, and the bladder symptoms were becoming more urgent; Wheelhouse's operation was therefore performed at once. The patient was placed in the lithotomy position, and a long silver probe passed down to the stricture. An incision was then made on to the end of the probe, which was pushed out of the wound and bent into a hook. The sides of the urethra were held open with artery forceps, a grooved probe insinuated through the stricture, which was divided, and the probe passed on into the bladder. It was now quite easy to pass a full-sized Lister's bougie from the penis to the bladder; so the patient was sent back to bed without having a catheter tied in. At the end of a week the urine was quite clear and all irritation of the bladder had ceased; so, instead of the daily passage of a bougie, a large gum-elastic catheter was tied in. While the catheter was kept in all the urine came by it, and the wound healed rapidly. It was removed in ten days, and the patient taught to pass a No. 12 Lister's bougie, and discharged a few days later. Altogether he was in the hospital only from Jan. 12th to Feb. 7th.

Remarks by Mr. PAUL.—I send this straightforward case for publication because I have so often felt the advantage of an early operation of this nature in stricture cases, and because I often notice that my surgical friends, while they laud the method advocated by Mr. Wheelhouse very rarely seem to adopt it. In the hands of specialists internal operations upon the urethra are much in vogue; at present I have never either split or divided internally a stricture, except in the penis, preferring in all cases where an operation is necessary to do perineal section. I think it is a pity that Mr. Wheelhouse recommends special instruments for his operation, as it is quite as easy to do it with those always at hand; and, with all due deference to his opinion, I do not find his sound and gorget of any material assistance, while their absence might influence some to attempt a different method of giving the necessary relief to the patient. In this case a catheter was not tied in at once on account of the cystitis; and at the conclusion of the treatment I adopted my usual practice of teaching the patient to pass a large metal sound for himself. It is the only permanent cure for most strictures, though but few, of the hospital class at any rate, are wise enough to adopt it.

CASE 3. *Stricture; Retention; False Passage; Relieved by Puncture per Rectum.*—James F——, aged twenty-seven, had gonorrhœa some years ago, but passed urine in a full stream until about twelve months back, when he had his first attack of retention of urine after a drinking bout. Since then, under similar circumstances, he has had three or four more attacks of retention, and at the same time the stream of urine has been steadily diminishing in volume during the intervals. On Feb. 2nd he was drinking, and on the morning of the 3rd was again attacked with sudden and complete retention. Relief had been attempted by catheter, and he bled profusely, but no urine was drawn off. He was admitted with the bladder moderately distended in the afternoon, and was in great pain. A metal catheter was passed into the urethra, but opposite the bulb left it for a false passage, and on withdrawing the instrument he at once strained away about an ounce of blood. Under these circumstances a morphia injection was given, and he was ordered to have a hot bath shortly, to be followed by hot fomentations to the abdomen, and further morphia if necessary. In the evening, though the treatment had given some relief, not a drop of urine had been passed, and it was therefore deemed advisable to puncture per rectum. The next day he was perfectly comfortable, and the urine was draining freely through the cannula.

On the 5th, after plugging the tube, he was able to pass urine by the penis, and it was consequently withdrawn.

6th.—Had a rigor, with nausea, headache, and diarrhœa. Temperature 104°. Ordered five grains of quinine every four hours.

7th.—Temperature fell below 100°, and became normal in a few days. The quinine was stopped on the 9th.

12th.—Soft bougies passed. No. 3 was the first to be gripped by the stricture, which was dilated to No. 6.

24th.—The patient was discharged with the stricture fully dilated.

Remarks by Mr. PAUL.—In a case of this kind, I think the choice lay simply between aspiration of the bladder and puncture per rectum. I chose the latter entirely on account of the false passage. In acute retention, when, though the urethra is uninjured, no instrument can be passed, aspiration is called for, and will almost invariably not have to be repeated, since the relief afforded by it, together with other suitable treatment, will permit the swelling and spasm of the urethra to subside, and in the course of twelve hours either the patient will have passed urine naturally, or it will be possible to introduce a catheter. But when a false passage is present, and it is extremely unadvisable to interfere with the urethra for at least a week or ten days, the better plan is certainly to adopt puncture per rectum, and retain the cannula *in situ* until the power to micturate has returned. The pyrexial attack on the 6th I believe to have been due to some urine filtering into the false passage and permitting septic absorption, as no instrument was passed until the 12th, and no trouble of any kind appeared in connexion with the rectal puncture. I am a strong advocate for early operation in all cases of obstruction to the outflow of urine, when that obstruction cannot be easily overcome by catheterism. We ought to remember that the kidneys are the only part of the urinary tract of vital importance, and, sooner than permit their structure to be damaged, a clean incision should always be made into the urethra or bladder, as the case may require. Sadly too often, while we are wasting time over a cartilagenous stricture with small bougies, pyelitis is grafted on to cystitis, and suppurative nephritis may develop at any moment, and show too late the danger of delay.

Medical Societies.

THE ABERNETHIAN SOCIETY.

SIR JAMES PAGET ON ST. BARTHOLOMEW'S HOSPITAL AND SCHOOL.

A SPECIAL meeting of the above Society took place on Monday, June 8th, Mr. W. T. H. Spicer, President, in the chair.

Sir JAMES PAGET, Bart., gave an address on "St. Bartholomew's Hospital and School fifty years ago." A large number of the members were present, together with about 120 of the nursing staff, who were invited as guests. Sir James Paget began by describing first the exterior of the hospital, saying how much more classical it was in appearance than now, and how all the four blocks which surround the square were then connected together by arches or gateways, which led into the neighbouring streets. A great improvement had taken place since then in that the square was now much quieter, for then it was almost as noisy inside as outside, where a cattle fair was held every week. In fact, it was a public thoroughfare. In some respects it was more rural, for attached to the vicar's house was a garden in which a mulberry tree flourished, and of which the vicar was very proud. Dr. Hughes was accustomed to say that he had heard the nightingale singing there. He (Sir James Paget) then went on to speak about the school buildings, and showed what great alterations had taken place lately, and how entirely changed was the whole locality. The operating theatre was what is now called Sitwell Ward. In the neighbourhood was a students' club situated over a baker's shop; here the students were accustomed to congregate and spend a good deal of their time in playing cards. He next spoke of the teaching, and mentioned how the majority of students had been apprenticed to general practitioners for three or four years before coming up to the hospital. Here they spent about eighteen months, which was quite sufficient time for them to obtain a very fair knowledge of medicine, considering the time they had already been at it. There was then only one examination at the College of Surgeons for the diploma. This consisted of about twenty-five minutes' *vivâ voce* before a number of the Fellows, all of whom sat at the same table. The teaching was entirely by lectures, the most eloquent of which were those given by Sir William Lawrence. Mr. Stanley used to lecture on Anatomy. This lecturer was remarkable not so much for the minute details as for the comic manner in which he delivered them, and for the curious so-called "tips" which he gave to the students to help them to remember their work. Dr. Hume, senior physician, lectured on Chemistry, which included Light, Heat, and Electricity; and, in addition, on Botany, Medicine, and Materia Medica: seven different subjects. He mentioned this in order to show how impossible it would be, in the present advanced state of these sciences, for any physician to teach properly so many subjects. There was very little clinical teaching; in fact, at this time the school was in a rapid state of decay as far as the teaching was concerned. With regard to the hospital staff, Sir James Paget said that the quality was excellent, but that the number was much smaller than it is now. There were three physicians and three surgeons; each had an assistant. In addition to this there was an apothecary. The junior staff consisted of one house-surgeon and five dressers to each surgeon. The house-surgeons lived together over King Henry VIII.'s gateway, facing Smithfield Market. The dressers were appointed from six to twelve months. There were no special departments, such as the ophthalmic, aural, and orthopædic departments. The great treatment at that time was bleeding, and he remarked that it would be difficult to say in what cases bleeding was not used. To everything which was acute bleeding was applied. It was used as a means of producing muscular relaxation, and was also used as an anæsthetic. Twelve to thirteen ounces of blood were frequently extracted from a man before a dislocation was reduced. Yet, notwithstanding, it was very rare for any mischief to arise from this practice. The large majority of patients recovered from the loss of blood, and in certain diseases he had no doubt a number of people benefited by it. Mercury and sarsaparilla were the only remedies used for syphilis at that time. Potassium iodide was just being introduced by Dr. Robert Williams, and was only commencing to gain reputation. Sir James Paget then went on to say that he thought diagnosis should be the future study of students to a much more minute extent than it was even now, and they should notice how the personal character of a patient influenced the disease, and also the action of the drug. He next referred to the surgical operations of the day, and remarked that not only was the number smaller, but the method of operating also differed greatly. Swiftness, simplicity, and brilliancy were the chief qualities of a good surgeon. These were essentially necessary, as they might very well understand if they remembered that anæsthetics at this time did not exist. For the same reasons surgical instruments were far less elaborate than now. The patient was placed on a lowering diet, and purgatives were administered for some days before the operation. Organic defects in the kidney, heart, &c., were not looked for, and hygienic treatment was very defective, so that it was not surprising if the mortality of operations was greater than now. The lecturer then referred to the nursing staff, and said that the sisters in those days, as now, were very practical women, but that the nurses were very far inferior, both in their capabilities and their social position, to what they are now. Finally, Sir James Paget made a few remarks on the medical students of fifty years ago, and said they were certainly not so refined, perhaps, as nowadays; but at the same time we should remember that society in general was also less refined. On the whole they were a hard-working set of men. In conclusion, he thanked the Society for having honoured him by asking him to address them, and said what great pleasure it had given him to lecture to a body of students again.—Dr. MATTHEWS DUNCAN then in a few words proposed a vote of thanks to Sir James Paget for his interesting lecture, remarking at the same time that he thought it would be very satisfactory if the Society were to ask Sir George Burrows to relate to them the curious manner in which patients were examined in those days.—Dr. NORMAN MOORE seconded the proposal in a few appropriate words, which was carried unanimously amidst much applause.

Reviews and Notices of Books.

Selected Monographs. 1. Albuminuria in Health and Disease, by Dr. H. SENATOR. 2. Some Considerations on the Nature and Pathology of Typhus and Typhoid Fever, by the late ALEX. P. STEWART, M.D. 3. Movable Kidney in Women, by Dr. LEOPOLD LANDAU. London: The New Sydenham Society. 1884.

THIS volume is composed of three essays, differing as widely in their style and character as they do in the subjects of which they treat; but they were all worthy of reproduction, as they are of careful perusal. Dr. Senator's monograph on Albuminuria may be taken as the latest utterance of science upon this obscure and difficult subject, to the elucidation of which the author has contributed so much. His views are based upon a theory of urinary secretion (which is more explicitly dealt with in a lecture appended to the essay) that differs to some extent from any that have hitherto been adopted. Thus, he regards the physiological process as made up of two components—a filtration or transudation by the agency of the glomerular tufts, and a true secretion by means of the glandular epithelium of the convoluted tubes. In some respects this is a reversion to the teaching of Bowman; and it differs from that of Heidenhain, who considered that secretion occurs through the glomerular epithelium as well as the tubular. Senator, however, believes that in the glomeruli we have to do merely with a transudation obeying the ordinary laws of that mechanical process, modified it may be by the special peculiarity of the vascular arrangement. He does not therefore hold that only the urinary water escapes by the tufts, but that there is an exudation of all blood constituents. A certain amount of serum-albumen and globulin must therefore transude, limited probably by the epithelial lining of the capsules. Sufficient, however, escapes to justify the belief in "physiological albuminuria," varying in degree according to circumstances of diet, exercise, and the like. The addition of more water and of the peculiar secretory products as the urine passes down the tubule reduces the percentage of normal albumen to a minimum, and this may still further be diminished by absorption. He quite discards the notion that any considerable amount of albumen normally transudes to be taken up by the epithelial cells, as was once maintained. The interesting subject of peptonuria and of propeptonuria, where the albumen is non-coagulable by heat, is alluded to, these conditions being attributed to the presence of such modifications of albumen in the blood under certain conditions. The essay deals in turn with the influence of alterations in blood pressure, in the renal epithelium, and in the condition of the blood, in inducing albuminuria. As to the first point, it is shown that the various forms of congestion produce albuminuria, but in various ways. Thus, temporary ligature of the renal vein causes exudation of albumen chiefly into the medullary tubules; cutting off the arterial supply is followed at first by this exudation into the Malpighian capsules, and later into the tubules; occlusion of the ureter leads to great dilatation of the tubules and of the interstitial lymphatic spaces, which become filled with albumen before this appears in the capsules. In degeneration of the renal epithelium albuminuria is to be attributed in part to the débris of the epithelial cells, and in part to increased transudation from the blood. Lastly, morbid conditions of the blood may induce albuminuria by increasing the transudation capacity of the glomerular tufts, while abnormal albuminous substances in the blood probably pass out more readily than the normal. In febrile and inflammatory states the condition becomes more complex, for in the latter there is the additional factor of inflammatory exudation, and especially the involvment of the glomeruli in this process. Besides the lecture on urinary secretion, there is also appended an essay on the Hygienic Treatment of Albuminuria, in which milk diet, baths, the avoidance of chills and of muscular exertion, and a sojourn in dry warm climates, form the chief recommendations. The translation is faithfully rendered by Dr. T. P. Smith, and the monograph is one which requires to be carefully studied, for it is full of closely reasoned argument.

The reproduction of the late Dr. Stewart's memoir, which was read before a Paris Medical Society in 1840, serves to remind us that a great share was taken by this physician in establishing the distinction between the two great continued fevers of this country. The essay shows how clearly Dr. Stewart had grasped the notion of the two distinct types of fever, which he had ample opportunity of observing at Glasgow; and yet, influenced doubtless by the *force majeure* of British opinion, he hesitated to do more than suggest that a case was made out for further inquiry. For Dr. Stewart's sake, it is to be regretted that he did not possess the energy to follow up his researches; but then perhaps we might not have had the masterly exposition of Jenner nine years later, which clinched the question beyond dispute. It is right, however, to bear Stewart's work in mind, for it was much in advance of the orthodox teaching of this country, and it shows that he possessed remarkable clinical acumen as well as independence of thought. The essay has been edited by Dr. Cayley, who appends a memoir of the author.

The essay of Dr. Leopold Landau on Movable Kidney in Women fills a gap in medical literature. It deals with the subject in the most thorough manner, but space forbids our attempting any analysis of the work, for the translation of which we are indebted to Dr. Champneys. It may be noted, however, that a considerable part in the production of hydronephrosis is assigned by the author to this interesting condition.

Operative Surgery in the Calcutta Medical College Hospital: Statistics, Cases, and Comments. By KENNETH MCLEOD, A.M., M.D., F.R.C.S., Fellow of the University of Calcutta; Surgeon-Major, Indian Medical Service; Professor of Surgery, Calcutta Medical College; and First Surgeon, College Hospital. London: J. and A. Churchill. 1885.

WE have read this book with great interest and pleasure. Dr. McLeod has tabulated all the operations performed by him in the Calcutta Medical College Hospital during his five years' term of office as first surgeon in charge. But he has done far more than tabulate his cases, for, in addition to a short description of each case, he has contributed comments upon each group or class of operations. In this way the dry details of statistics have been clothed with living interest, and the reader is made to realise in no imperfect manner the conditions of surgical practice in Calcutta, and the actual scientific and practical outcome of the entire operative work of five successive years. In discussing the mortality after operations in general, Dr. McLeod lays stress upon the importance of septic poisoning, and shows that patients in this hospital are specially prone to the ravages of all septic diseases. Suppuration occurs in the natives with great rapidity and frequency, and their lack of stamina—at any rate in Calcutta—leaves them an easy prey to exhaustion and blood-poisoning. The state of the hospital was formerly very bad; and, as shown by Sir Joseph Fayrer in his "Clinical Surgery" and "Clinical and Pathological Observations in India," erysipelas and osteo-myelitis used to be endemic in the wards. Much has been done to improve this state of things, and the success of these efforts was quite observable. But Dr. McLeod shows conclusively that the introduction of a careful aseptic treatment of wounds has been a far more powerful weapon against the evil results of operations and wounds. He confesses himself to be—and not without good reason—a warm admirer of Sir Joseph Lister's plan of wound treatment; and it is noteworthy that he found himself unable to carry out the treatment with full success until he had carefully studied it as practised by Sir Joseph Lister himself. This is but another proof that the reported failures of many surgeons who profess to practise antiseptic surgery are to a large extent due to their failure to carry it out efficiently. Although fully alive to the predisposition among his patients to the development of septic diseases, Dr. McLeod states: "I have never seen septic disease of any sort arise in a patient whose wound was in an aseptic condition; and, on the other hand, in those cases in which I have had the misfortune to witness the development of constitutional septic disturbance, this has always been preceded or accompanied by manifest signs of local putridity." Full as the book is of interesting matter in every part, most readers will be specially interested in the chapters devoted to the treatment of elephantiasis scroti and the radical cure of hernia. In each operation Dr. McLeod has had considerable experience. He is a strong advocate for the direct operation for hernia, including ligature of the neck of the sac, removal of its fundus, and suture of the fibro-muscular walls of the inguinal canal. He gives in full detail his method of operating, which is the best we are acquainted with. The almost total absence of strumous diseases of bones and joints and allied affections, and the frequent occurrence of tetanus, are striking to an English surgeon. In view of the attention which is just now being given to the alleged increased frequency of malignant disease in England, it is important to note that Dr. McLeod shows that this disease is very common among the native population in India. This is no new fact, but the statistics before us fully demonstrate it. Surgical scarlet fever is an affection which has recently excited a good deal of attention, and at the close of last year an important discussion upon it occurred at the Medical Society of London. It was then shown—we think conclusively—that there are cases which may truly be called surgical scarlet fever. But more than one speaker referred to cases of erythema coming on after operations which could hardly be included under this category. We notice that Dr. McLeod incidentally affords us some interesting evidence on this point. He states that he has observed "several instances" of "surgical scarlatina," but adds, "as scarlet fever is an extremely rare disease in India, it is quite certain that surgical erythema is a distinct malady from scarlatina." We have no space to refer to many other points of interest dealt with more or less fully and directly by the author, but we must add that while writing of the results of his own work he has rendered his book remarkably impersonal, and the reader is but rarely reminded of a fact which too many authors never fail to obtrude.

New Inventions.

THE HOLLOW EYE SPECULUM AND DOUCHE FOR THE TREATMENT OF GONORRHŒAL OPHTHALMIA.

THE two chief obstacles which are met with in the treatment of gonorrhœal ophthalmia are—the rapidity with which the discharge re-forms after its removal, and the difficulty of applying astringent or antiseptic solutions to the inflamed conjunctivæ on account of the swelling of the lids. So great is this difficulty that the external canthus has often been divided to remedy it, and the late Mr. Critchett even divided the upper lid through its centre and stitched its halves apart. The hollow eye speculum and douche is an instrument which Messrs. Weiss and Sons of the Strand have made for me to overcome these two difficulties. It consists of an ordinary spring speculum, the two limbs of which are hollow and prolonged separately for about a quarter of an inch beyond the spring; these are each connected by means of indiarubber tubing to the two arms of a Y-shaped piece of metal tubing; the foot of the Y-shaped *piece is joined by another piece of tubing to the tap of an* irrigator. The outer borders of the portion of the limbs of the speculum which pass beneath the lids of the patient are each perforated by four holes, the lower part fitting into the upper so as to facilitate its introduction between the inflamed lids. The patient lies on his back on a couch; the speculum, having been connected to the irrigator which hangs above the patient's head on the wall, is introduced, and the tap turned; the fluid then circulates from the irrigator down the tubing to the Y-shaped piece, through its two arms to the limbs of the speculum, and out at the holes into the conjunctival sacs; the patient holds a kidney-shaped tray close to the side of his head to catch the waste fluid. In this way the accumulation of the discharge can be prevented and antiseptic and astringent solutions efficiently applied to the whole of the conjunctival surface. Mr. Edgar Brown has published a description of an instrument of his invention which consisted of a hollow elevator. The advantages I would claim *for the hollow speculum are:—First,* it does not require to be held in; once fixed, the patient can manage it himself. Secondly, it irrigates both conjunctival sacs at the same time. Thirdly, it can be used as a speculum and the condition of the cornea investigated, and any medicament that is necessary applied to it. E. TREACHER COLLINS.

Royal London Ophthalmic Hospital, Moorfields, June 9th, 1885.

RUSSIAN EXPERIENCE IN THE TREATMENT OF VARIOLA.

DR. REIMER, in a paper read before the St. Petersburg Medical Society, summarises his experience of the various methods of treating variola that have been recommended of late years, an experience extending to 1300 cases. These methods are as follows:—

Weidenbaum's ointment (cinereum with soap and glycerine). The pustules developed rapidly, but distressing itching followed, and the course of the fever was not shortened.

Caoutchouc solution.—With children a burning sensation was complained of. *Four of these cases died of septicæmia.*

Nitrate of silver appeared to have no effect on the result, except that the scars were unusually deep.

Hebra's iodine application.—Great pain was experienced, and the pustules ran together into a large scab, which fell off somewhat quickly; but this had but little influence on the formation of the cicatrix.

Corrosive sublimate was tried in forty-six cases, with careful watching on account of its poisonous properties. A solution of 1 to 500 was employed, a mask being saturated with it and applied four times a day, for ten minutes, to the face. The development of the pustules seemed to be hastened somewhat, but the scars were much the same as when other treatment was adopted.

Schwimmer's carbolic oil paste.—Schwimmer said the patients liked this method, as it reduced the feeling of tension, and that no case of serious suppuration of the face had occurred; also that the drying up generally occurred *on the ninth to the eleventh day, instead of from the thir*teenth to the fifteenth, and always taking place several days earlier on the face than other parts of the body. Reimer found considerable difficulty in employing this treatment with children who could not be got to keep on the mask; he therefore substituted a powder in which carbolic acid was made up with talc, starch, and chalk. He did not find the powdering, which was carefully done four times a day, a very agreeable operation, owing to the repulsive mixture formed with the pustular secretion, or, indeed, very advantageous, as he could not observe that in any of the seventy-seven cases in which it was used the suppuration was perceptibly modified. The same may be said of the forty-eight cases in which he used the paste. Under the micro*scope there was certainly a diminution of* micrococci chains and pus corpuscles. Under the carbolic treatment thirteen children showed symptoms of carbolic poisoning; in three of these life was with difficulty preserved. Nephritis occurred in twenty-six cases, seven of these having hæmaturia.

Under *Burkhard's and Zülzer's xylol treatment*, fifty-two cases were observed, but the formation of the cicatrix was but little modified.

Afterwards, Dr. Reimer tried a number of highly commended methods of treatment, without any satisfactory result. Happening to make use of *salicylic acid* in a case of hæmorrhagic small-pox with the hope of reducing the temperature, he was struck with its remarkable effect upon *the disease, and then remembered* that Schwimmer in 1876, and subsequently Claridge, had recommended salicylic acid. The acid was given in five-grain doses every two hours in fourteen cases with marked effect, the course of the disease being in all cases shortened. Microscopic examination of the blood of patients in the early stage showed that with a single day's treatment the rod-shaped bacteria which had been distinctly visible had completely disappeared.

THE LANCET.

LONDON: SATURDAY, JUNE 20, 1885.

The election of members of the Council of the Royal College of Surgeons of England, which will take place on the 2nd of July next, will be one of the last conducted on the old lines. Not only may the mode of election and the conditions of eligibility of candidates be altered before another year comes round, but it is in the highest degree improbable that after this year any candidate will deliberately stand forth as the acknowledged and accredited champion of the character, constitution, and traditions of an unreformed Council. Reform is in the air, and reformers are in the ascendant. Whether the latter will determine to make their influence prevail this year or not will perhaps depend rather upon sentimental considerations than upon a rigid adherence to political convictions. In some respects the issue is a simple one. Three members of Council are retiring by rotation. Two of these, Messrs. **Erichsen** and **Holmes**, are known to have steadily and consistently endeavoured to effect some amendment in the Council, and to bring this body into harmony with those whom it nominally represents. On the other hand, the third retiring candidate, Mr. **Savory**, is equally well known to have opposed and resisted most of these endeavours. Unfortunately, this gentleman is the only one of the retiring candidates who seeks re-election; so that Mr. **Savory** seeks re-election not only as one who has notoriously voted against the adoption of some of the recommendations of the Association of Fellows to which the Association attaches very great importance, but he comes forward as the representative of those traditions of the Council which many believe to be in the highest degree inimical to the interests not only of the College itself but also of surgical science and art. Elected to an examinership in 1870, Mr. **Savory** continued to hold this coveted post after election into the Council in the year 1877, and resigned it only a few months ago, after having held it for a period of nearly fifteen years, and in spite of an existing resolution of the Council disapproving of anyone holding the office for more than a maximum period of ten years. It is impossible to predict what influence these considerations may have upon the voting next Thursday week. It need, however, occasion no surprise if many Fellows decide that Mr. **Savory**'s great administrative abilities and his experience in the affairs of the College more than compensate for these grave disqualifications. It is a striking testimony to the forbearance and moderation of the Association of Fellows that it has resolved not actively to oppose Mr. **Savory**'s re-election. To expect the Association to promote his election would be to look for a loving-kindness almost more than human.

The contest for the other vacant seats will be unusually keen. The candidates are, in their order as Fellows, Messrs. **Gant**, **Mason**, **Rouse**, **Cowell**, **Macnamara**, and **Pemberton**. Four of these gentlemen have not only been candidates in former years, but they are otherwise known to take an active interest in all matters relating to medical education, ethics, and politics. The two other gentlemen, Messrs. **Mason** and **Rouse**, have not, we believe, hitherto manifested any such interest, and until they do assume a distinct political character it is scarcely likely that they will have a substantial following. The contest, therefore, may be expected to be carried on between Messrs. **Gant**, **Cowell**, **Macnamara**, and **Pemberton**. Considering that the last-named gentleman was only five votes behind a successful candidate last year, his election this year may be deemed almost certain. Mr. **Pemberton** is a provincial surgeon of deservedly high repute, and he has proved on more occasions than one that his political convictions are clear and strong, and, what is more to the purpose, that he has the courage of his convictions; and if the pitiable lapses of some recently elected members of Council are called to mind, moral courage must be welcomed as by no means an insignificant qualification for a seat in the Council. Of the remaining candidates, Mr. **Gant** and Mr. **Macnamara** are both known to be strenuous advocates of educational and collegiate reform. The latter gentleman has quite recently, in the part he has taken in promoting a University improvement scheme, given practical proof of his anxiety to improve medical education in England, and to remove some of the grave disabilities which embarrass metropolitan students. His candidature therefore cannot fail to be acceptable to all who consider that amelioration of medical education and medical status is intimately bound up with the reform of the Council of the College of Surgeons.

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The International Sanitary Conference at Rome has suspended its sittings, and will not again meet until the latter part of the year. We may therefore at this stage briefly review its proceedings, and learn something of its views from the decisions at which it has already arrived.

The Conference began its business by appointing in the first instance a Technical Commission of all the medical members to consider and report on those points which required professional knowledge. Our columns have contained accounts of the proceedings of this Commission, which have shown that, although the old belief in quarantine has not yet altogether departed, its end is not far distant. It is, indeed, difficult for countries which have made little or no effort to improve their sanitary condition at once to abandon any method which has about it the semblance of protection. For them the introduction of disease means disaster, and it is only when they have absolutely appreciated the uselessness of quarantine that they will fully consent to seek other means of safety. Nevertheless, the decisions to which the Technical Commission have come show distinctly that opinion is gaining ground in favour of the system of medical inspection which in this country has replaced quarantine. At an early meeting of the Commission quarantine measures by land were voted to be impracticable, and therefore useless; and it was only as regards maritime quarantine that a different view was taken.

Thus it was decided that every vessel passing from the Red Sea into the Mediterranean should be inspected by an officer appointed by an International Commission, and that he should have authority to determine whether the vessel was "suspect" or not, and that it should only pass through the Canal if this point were decided in the negative. If cholera drugs. The medical profession is the indispensable profession of all classes. It will never be found exacting or ungenerous in its dealings with the poor; but it must, for the very poor's sake as well as for its own, claim its rights. The present political discussions on the disfranchisement of electors for receiving medical relief are very important. A sound law on the subject may give an enormous stimulus to independence and self-help. On the other hand, it will be a public misfortune if the exigencies of mere party politics lead public men to make light of improvidence in medical matters.

Annotations.

"Ne quid nimis."

A TEACHING UNIVERSITY FOR LONDON.

ON Monday last another meeting of the delegates from the medical schools and the Executive Committee for promoting the formation of a Teaching University took place at the Society of Arts, and a draft report, which we publish on page 1143, was agreed to. The outline of the plan for a Teaching University, so far as the Medical Faculty is concerned, may therefore be looked upon as complete; but we understand that the Faculties of Art and Science are lagging behind in organisation, whilst the scheme of the Faculty of Laws is altogether in abeyance. If the project as a whole is to survive, it will be necessary for the promoters to lose no time in consolidating the other Faculties. With the ground plan which is suggested in the report for the University, but little fault can be found, and the sequence and relation of its constituent elements seem to be quite right and proper, but we question whether it will be wise, supposing the University ever to be founded, to deprive graduates of all share in framing its regulations and its management. The present report makes no mention whatever of graduates, so that they will be given a degree only. The oldest graduate will have less to say about the proceedings of the University than the youngest teacher, whose degree may have been obtained elsewhere, or who may not have a degree at all. Again, has not too much power been given to the governing body?—for the Boards of Studies are merely to recommend, and there is no security that the governing body will act on such recommendations, and if it does not, the Boards of Studies can do nothing. The proposition for the concentration of the scientific teaching in the medical schools is a very good one, and has frequently been urged by us, but we question very much whether the practical solution of the difficulties involved is within the power even of the Teaching University. The Colleges and medical schools are sure to regard with great jealousy the suggestion to establish chairs in connexion with the new body; for, unless very carefully guarded against, a new teaching body will be added to those already existing, which are now too numerous. But probably these criticisms are premature and of little real importance, for the scheme has a very difficult future yet before it, and we welcome it rather in its bearings on the present University than in view of a possible second university in London. The Special Committee, under the chairmanship of Lord Justice Fry, is summoned for Friday next, to consider the report of its subcommittee, so that the centre of interest has again shifted to Burlington-gardens.

AN EARLDOM FOR MR. GLADSTONE.

WHATEVER may be thought of Mr. Gladstone's foreign policy, there can be but one opinion of his conspicuousness as a public figure and his high qualities as a public man. No State can afford to do otherwise than hold such a man in honour, and it would bode ill for Parliament if it ever ceased to include at least one such man, and to regard him with more reverence than has occasionally of late been awarded to him. The offer of an earldom by Her Majesty is a fit tribute to one of the greatest servants that has served one of the best of Queens. We have often urged Mr. Gladstone's elevation to the peerage. We well know that such a sphere has not greater attractions for him than the House which he has so much adorned, and the fame of which he has so well sustained. But the atmosphere is calmer, and the hours are more reasonable, and—a benevolent motive will weigh more with the illustrious statesman—his acceptance of an earldom would be kind to the Upper House, and supply the material it wants to make it what it must be if it is to remain a veritable House of distinguished men.

ANNUAL REPORT OF THE REGISTRAR-GENERAL FOR ENGLAND.

THE issue of the Registrar-General's 46th Annual Report gives the detailed vital statistics of England and Wales for 1883, supplementary of the briefly summarised statistics of that year published in the Quarterly Return for the fourth quarter of 1883, and in the Annual Abstract presented to Parliament early in 1884. The main features of the statistics of 1883, as well as those of the more recent year 1884, were a continued depression of marriage- and birth-rates, mainly the result of the prevailing commercial depression, and the maintenance of the remarkable reduction in the national death-rate which dates from the year 1876, when the Public Health Acts of 1872 and 1875 may be presumed to have come fully into operation. During the first thirty-three years of civil registration the English death-rate was practically stationary at 22·4 per 1000, whereas in the five years 1876-80 it declined to 20·8, and in the first four years of the current decennium it has further fallen to 19·4. This result in the face of steadily increasing urban aggregation affords the most triumphant reply to the race of sanitary sceptics, if it be not yet extinct. The analysis of causes of death in the Registrar-General's last annual report, however, affords abundant evidence that the "rest and be thankful" stage of the sanitary crusade against preventable death and disease has not yet been reached. In proof of the fact that a remunerative field for further health progress still remains we need only point to figures in the report under notice showing that the recorded death-rate in 1883, in Lancashire and in Monmouthshire, was equal to 22·3 per 1000, while it did not exceed 16·6 either in Oxfordshire or in Berkshire; and, further, that those recorded rates considerably understate the real excess of mortality in Lancashire and Monmouthshire during 1883.

THE BLOOD IN SCURVY.

SEVEN cases of uncomplicated scurvy, three of which proved fatal, were last summer under the care of F. Stazevich in the military hospital at Moscow. The blood examined by Lavdovski's osmic acid solution (1 per cent.) showed irregular red corpuscles of dissimilar magnitude, also more or less atrophied corpuscles adhering together. After recovery this irregularity disappeared. Two cases died of intestinal hæmorrhage, one of hæmorrhagic pleuritis. The blood of these was found at the autopsy to be dark and fluid. In the cardiac cavities and large vessels there were either no coagula or they were of a light colour, and easily torn. In two cases extravasation was found in the pleura, the surface of the heart, and the aortic valves. The spleen was enlarged, light coloured, and easily broken down; the liver enlarged; the cortex of the kidney increased in thickness. The intestinal mucous membrane was soft, swollen, and contained extravasated blood; the solitary glands were only enlarged in one case, and there was likewise ulceration of the colon only in one case; the peritoneal glands were invariably enlarged, and the brain was very anæmic. Under the microscope some of the preparations of the muscles of the buttock showed small extravasations of blood between the fasciculi; the liver cells were enlarged and cloudy, also the epithelium of the urinary passages; the alveoli of the peritoneal glands were much enlarged, and filled with round cells of the size of white blood-corpuscles. The mucous membrane of the small intestine could scarcely be recognised under the microscope, and the epithelium could not be seen at all. The commencements of the lymphatics were filled with finely granular detritus; the vessels of the mucosa were much distended, and surrounded by extravasations of blood. In places the mucous membrane was detached from the muscular coat, which had a cloudy appearance.

A HISTORY OF CRIME.

A REMARKABLE trial has just been concluded in Paris, a trial which brought to light a long series of murders perpetrated in cold blood, and with no other apparent motive than the acquirement of a comparatively paltry number of francs. The convict Pel, aged thirty-six years, a watchmaker by trade, seems to have begun his nefarious practices as far back as 1872, at which date his mother died under circumstances which leave but little doubt that her decease was owing to other than natural causes. The next fatality that befell the unfortunate family was the death of Pel's wife, soon after her marriage. From the symptoms observed by the doctor consulted in the last hours of her life, there appears every reason to believe that she succumbed to the action of an irritant poison; moreover, the recent chemical analysis of the exhumed remains, conducted by MM. L'Hôte and Brouardel, supports the theory that the drug employed was some form of arsenic. These eminent chemists detected an appreciable quantity of the mineral—about one milligramme in 200 grammes of the liver and kidneys. The brother of Madame Pel suspected foul play at the time of his sister's death, but after consultation with some relatives the evidence of Pel's guilt was not deemed sufficiently conclusive; and from the natural desire to avoid a public scandal no further steps were taken to investigate the matter until just recently, when it transpired that Pel was charged with having poisoned his mistress, Elisa Böhmer, and disposed of her body by burning it in a stove. In the interval between these alleged crimes Pel had married again and had parted from his wife after the latter, together with his mother, had shown signs of severe gastric disturbance. Nor did his evil practices end with this record, for he is reputed to have attempted the lives of two servants, one of whom has been missing since she was last known to have been in Pel's company, the general belief being that she fell a victim to foul play. It was proved in every instance that he would have benefited by the death of the women with whom he was intimately connected, and that in more than one case he actually became possessed of a sum of money. He was charged only with the murder of his first wife and last paramour, and was found guilty, without extenuating circumstances, on the second count of the indictment. In his defence he urged that his mother died a natural death; that his wife succumbed to arsenical poisoning which she had administered to herself, as a remedy, in the form of Fowler's solution; and that his paramour, Elisa Böhmer, had left his domicile without telling him of her destination. The prosecution met these statements either with a direct denial or by showing that there was circumstantial evidence of their falsity. It was further proved by experiment at the Morgue, that a human body could be consumed by fire in a stove similar to the one found in the convict's room in the space of forty hours. In all probability the prisoner would have been acquitted had he been charged with only one offence, but the accumulated evidence proved too strong even for the proverbial sympathies of a French jury. The case confirms the belief—if confirmation be needed—that nothing is too horrible to deter a man imbued with the instinct of crime from carrying out his fell designs. Mother, wife, mistress, and servant were sacrificed by intent or act to the all-engrossing passion of a criminal nature. The foregoing history is replete with interest and information. It will serve to illustrate the pages of "legal medicine," but we doubt if it will act as a deterrent to others who possess the same promptings to murder which Pel inherited, developed, or acquired. Fortunately for society, such monsters are few in number, and yet the contemplation of their existence is enough to make the strongest shudder and grow pale.

THE CROONIAN TRUST.

THE decision of the College of Physicians, to dispose of the increased funds accruing from the Croonian Trust, by instituting lectureships on anatomy and physiology in relation to pathology and therapeutics, can hardly be regarded with unmingled satisfaction. Although in this way the difficulties of adhering to the original Trust may be surmounted, it is questionable whether the money could not have been utilised to greater advantage; for there is no disguising the fact, that the collegiate lectures are attended by comparatively few members of the profession at present, and if the number and extent of these lectures are to be greatly increased, the audiences will, we fear, diminish even more. We fully recognise the difficulties which the College had to overcome, especially as the sum in question would hardly suffice to endow a professoriate, the only reasonable alternative; but we could have wished that some other means of encouraging research and advancing medical knowledge had been conceived than the extension of the lectureship system, which seems to be amply enough provided for at present. Nevertheless, the adoption of this plan may lead to a more liberal remuneration of the Croonian lecturers, of whom two might be appointed annually to deliver a course of six lectures each - the one in pathology, and the other in therapeutics.

CHOLERA IN SPAIN.

CHOLERA is undoubtedly spreading in Spain. It is no longer limited to the province of Valencia and to Madrid, but is becoming diffused in adjoining districts. Castellon is now invaded, and twenty-seven persons have succumbed, while not only the villages on the border of the province of Murcia are suffering, but the city of Murcia is itself the seat of a serious outbreak of the disease, which threatens to equal in severity some of the more serious local disasters of last year. Altogether the last official bulletin announces the deaths of seven persons in the city of Valencia, forty-one deaths in the city of Murcia, and seventy-one deaths in the province. As yet we have no further confirmation of the report that cases have again occurred in Marseilles, but it cannot be anticipated that Southern France will much longer escape from a return of the epidemic. To prevent this invasion a decree has just been published, prohibiting the importation into France of bedding across the Spanish frontier. That the appearance of cholera in France has been already so long delayed is probably due to the cooler weather which has prevailed during the present season, but we may expect before many days have passed to hear of certain suspected cases, which will come to be acknowledged as soon as they are sufficiently multiplied to make concealment no longer a possibility.

TREATMENT OF ILEUS.

THE value and expediency of washing out the stomach in cases of intestinal obstruction, recently advocated by Kussmaul and Senator, have been discussed at the Berlin Medical Society (*Deutsche Med. Wochensch.*, Nos. 21, 22). Dr. Bardeleben had pursued the practice in cases of ileus, without in any instance obtaining a cure, and was impressed rather with the risk it gives of encouraging delay in resorting to laparotomy owing to the marked alleviation of symptoms which follows the measure. He also instanced the fact that symptoms of ileus frequently arise from conditions other than those of intestinal constriction, quoting a case of traumatic rupture of the bowel with peritonitis, and three cases of cancer, one of the pylorus associated with a large scrotal hernia, and two of the peritoneum, in which operations were undertaken for the relief of supposed strangulation. Such cases of course could not be benefited by washing out the stomach. Nor did he think it of much avail in true ileus. A man had a small inguinal hernia which he had reduced himself. Symptoms of internal strangulation arose, and in six days they became urgent. Treatment by opium, washing out the stomach, and enemata alleviated the symptoms for a few days; but on the sixth day laparotomy had to be resorted to. A constricting band was found and divided; but death ensued from peritonitis in five days. Bardeleben thought that a more favourable issue might have occurred if the operation had not been delayed owing to the amelioration produced by washing out the stomach. In another case, in which the symptoms were severe and the abdominal distension great, the constricted gut was found to be gangrenous. The necrosed part was excised, and the divided ends of the bowel sutured; but the patient died the next day. In a third case, marked by great distension, the seat of strangulation could not be detected on laparotomy. The bowel was opened at its lowest part, and much fæces escaped. This patient succumbed in *two days from peritonitis and collapse. Dr. Schmid showed* a specimen from a woman who had been ill for six weeks before admission into the Augusta Hospital. There had been complete obstruction for six days, and for two days fæcal vomiting. The stomach was washed out five or six times, with transitory relief; but death occurred in twenty-four hours. The cause of the obstruction was found to be the inclusion of a coil of ileum in a loop formed between the large intestine and the uterus, which were firmly adherent to each other. There was commencing gangrene, and, owing to the adhesions, it was clear that an operation could not have given relief. Dr. Kuester related three cases simulating ileus. A woman had suffered a long time from vomiting, which became fæcal. Washing out the stomach checked the vomiting, and nutriment could be taken; but the general condition not improving, laparotomy was performed, when the gall-bladder was found to have *been perforated by a gall-stone. This was extracted, the* rent in the viscus sutured, and the peritoneal cavity cleansed of extravasated bile; but peritonitis was already present, and the patient died next day. Another case of gall-stone leading to peritonitis was also submitted to laparotomy without avail. In a third case, where vomiting had lasted for six days, the obstructing cause was found on examination to be a massive parametric exudation. The stomach was repeatedly washed out, and the patient recovered. Whilst agreeing that the measure entailed delay in operating, Dr. Kuester thought it useful in doubtful cases as an adjuvant to expectant treatment. Further, the ill success of laparotomy is often due to the great distension of the bowel; and the general condition of the patient is an index to its performance. Dr. Hahn had performed laparotomy in twelve cases of ileus, and in no case could washing out the stomach have given permanent relief. Where the procedure was of use was in cases of fæcal accumulation, which could be just as well treated by ice-water enemata. Dr. Henoch, on the contrary, thought the palliative effect of the method a gain, and instanced a case where washing the stomach had succeeded when enemata had failed. He recommended its use in doubtful cases, and the resort to operation if the general condition was not thereby improved. Dr. Senator held that in cases where washing out the stomach palliated the symptoms, and in some of those in which a cure was obtained, there was not invariably obstruction from fæcal accumulation in the large bowel; and he confirmed the statement that this measure had succeeded when enemata had failed. He still adhered to the opinion that it was a procedure of great value. Dr. Wolff would employ it not only to possibly remove the obstructing cause, but because by relieving the stomach from its fæculent contents it places the patient in a more favourable condition for operation. Dr. v. Bergmann instanced the danger in fæcal vomiting of secondary gangrenous pneumonia from inhalation, which washing out the stomach would obviate. In reply, Dr. Bardeleben admitted the difficulties in laparotomy, but insisted upon its being done early. He was not opposed to washing out the stomach, for he had done it in many cases. The main difficulty in these cases lies in the arrival at a clear diagnosis and the impossibility of *formulating any general rule of treatment.*

SCARLET FEVER CONVALESCENTS.

THE problem of dealing most effectively and wisely with convalescents from scarlet fever cannot yet be said to be solved, though too much praise cannot be given to Miss Mary Wardell for her brave attempts to settle it. The magnitude of the question may be gathered from Sir Rutherford Alcock's statistics, showing that while in ten years, 1870 to 1879, 57,423 people died from small-pox in England and Wales, no less than 173,124 died from scarlet fever. Miss Wardell's Home at Brockley Hill, Stanmore, is still in need of funds to complete the arrangements and furnishing contemplated, and even to continue the present scale of work. In a well-ordered household it is easy to prevent the occurrence of a second case of scarlet fever. The problem which benevolence has to solve—whether personal or State benevolence is a grave question—is how to place the poor man in this respect at a similar advantage. Meantime those who are benevolently disposed will do well to assist Miss Wardell.

MONSTROUS SPERMATOZOA.

Gaillard's Medical Journal for May contains a short paper by Dr. Ephraim Cutter of New York, on "Variations in the Form of Human Spermatozoa." He figures some examples of two-headed and three-headed spermatic filaments which were observed by Dr. G. H. Salisbury in 1881, and gives a second figure containing examples of these deformities observed by himself in human semen, as well as two-tailed and three-tailed spermatozoa. Dr. Salisbury's specimens were obtained from pure semen; Dr. Cutter obtained his from semen mixed in the urine. The latter *writer suggests that certain* congenital deformities may depend upon monstrosities of the sperm, and *seems to hint* that a double-headed monster may be the *offspring of a* two-headed spermatozoon.

NEW TESTS FOR SUGAR IN URINE.

Some years ago Dr. George Hay pointed out, as others have done, the unreliability of Trommer's test for sugar in the urine. An article has recently appeared in the *Therapeutic Gazette* by Dr. Hay. It gives an account of an experimental investigation of the reactions of various cupric salts with grape sugar. Experiments have been made with cupric chloride, sulphate, nitrate, acetate, oxalate, citrate, tartrate, and acetate followed by tartrate, also with zinc sulphate followed by copper tartrate, zinc acetate followed by cupric tartrate, sulphate of aluminium followed by cupric tartrate, acetate of aluminium followed by cupric tartrate, protochloride of tin followed by cupric tartrate, acetic acid and acetate of lead followed by cupric tartrate. The tests are said to be much more reliable than any that have hitherto been proposed. Dr. Hay strongly recommends some of the tests for quantitative purposes. One general [illegible] pervades the whole of the tests, and this is the separation of substances which interfere with the reactions. We will describe two of the methods most strongly recommended. Thirty drops of a saturated solution of cupric acetate are added to two drachms of urine containing one-fifth of a grain of grape sugar. The mixture is heated in a bath of boiling water for ten minutes, and then cooled by immersion in cold water. A bulky precipitate results. The whole of the contents of the tube are turned on a filter; a few more drops of the acetate of copper are added to the filtrate, with a view to removing everything precipitable. If the fluid remain clear, a grain and a half of cupric tartrate is added, and then potash in excess so as to form an intensely blue solution. Heat is next applied, when the suboxide of copper is precipitated. Here is another method: Ten drops of a strong solution of chloride of tin are added to two drachms of urine containing one-fifth of a grain of grape sugar. An abundant pink precipitate results. The test tube and contents are heated and afterwards cooled by immersion and filtered. The filtrate must then be retested with a few drops of the solution of chloride of tin. If it remain clear, a solution of carbonate of soda is added till a faint alkaline reaction is obtained; heat is applied, and a yellowish-white precipitate of oxide of tin is thrown down; then filter whilst hot; the filtrate should contain no salt of tin. Tartaric acid is added to the filtrate until a faint acid reaction is present; then a grain and a half of cupric tartrate is added, and next potash in excess, with the production of a clear blue solution. Heat is applied. In five minutes the fluid becomes yellow; in ten minutes an orange-yellow precipitate forms of suboxide of copper. There can be no question of the neatness and cleanliness of these methods of testing for sugar, but they would involve too much labour and take too much time for ordinary clinical purposes.

THE CONTAMINATION OF CLOTHING.

Once more the dangers of home work in the tailoring trade have been brought before the public. At the Worship-street Police-court, a woman was convicted of having covered her child over with the military trousers she was making while the child was suffering from small-pox. In spite of the warning given, the trousers, eighteen pairs in all, were taken to her employers' shop without previous disinfection. The woman was fined £1. But for one case thus discovered scores remain concealed. The difficulty of earning even the most meagre subsistence in the tailoring trade is so great that we can well understand the temptation to deny the existence of such infectious disease as may stop the supply of work. It is not fair or reasonable to expect persons on the verge of starvation to risk the little they earn for the sake of preserving the health of others. Either home work must be entirely abolished, or else all who work at home must be certain of receiving ample compensation when such work is stopped by the outbreak of fever. Otherwise the great majority of workers will never consent to voluntarily reveal what may incapacitate them from earning their living. At a recent meeting of working tailors, convoked for the purpose of founding a co-operative clothiers' manufactory, one of the speakers frankly confessed that he had used the clothes he was making as bedding for his children when they were down with scarlet fever. In the street of Spitalfields, where he lived, small-pox had visited a number of houses inhabited almost exclusively by tailors who worked at home. No precaution had or would be taken while the dread of starvation was the uppermost thought in the mind of the unfortunate East-end tailors. In such quarters public workshops under official supervision, where neither Factory nor Sanitary Acts could be defied, would render a great service. The public would also do well to inquire before purchasing whether the clothes came from a workshop under the Factory Act, and thus bring some pressure to bear upon the master tailors.

NEPHRECTOMY IN LEYDEN.

Prof. van Iterson of Leyden reports a case of nephrectomy in a female patient aged twenty-six. For many years she had suffered more or less from renal colic; a tumour then appeared in the left lumbar region, which after a time was opened by free incision, a considerable quantity of pus being discharged. The urine, which had previously contained pus, now became free from it, and, though strongly acid, it at no time contained calculi. When she was admitted, two years later, under the Professor's care, the fistulous opening was still discharging pus; there was a certain amount of infiltration of the skin in the neighbourhood; the urine contained a few pus-corpuscles, vaginal epithelium, and mucus, but no albumen, the solids being 3·1. About 800 cubic centim. were passed per diem. On consideration of the history of the case, it was thought probable that the cause of the suppuration of the kidney was a calculus, but that, after free exit had been made for the pus, nothing had passed through the left ureter, the right kidney probably alone performing the secreting function. It was decided to operate, performing nephrotomy or nephrectomy, according to circumstances. An incision was made from the eleventh rib to the crest of the ilium. On examining with the hand, an opening was found leading to a cavity in the kidney, which was much enlarged and freely movable. An aseptic ligature having been firmly fastened round the pedicle two fingers' breadth from the organ, this was severed and removed. The wound was dressed with iodoform and iodoform gauze. The patient rapidly recovered. The kidney, which was examined by Herr Siegenbeck van Heukelom, demonstrator of pathological anatomy, was bean-shaped, elastic to the touch, rather less hard than fibrous tissue, and measured in length 150 millimetres, and in breadth 45 millimetres below and 60 millimetres above the hilus, the upper part being lobed. An irregular aperture admitting two fingers existed above. On section the substance of the kidney was found to be riddled with cavities, the walls of which varied in thickness from 4 to 12 millimetres; their structure was seen under the microscope to consist of highly degenerated renal tissue. No calculi were found. The cause of the renal suppuration could not with any certainty be determined, but Professor van Iterson thinks it probable that the origin was due to lithiasis, the attacks of colic being perhaps caused by the passage through the ureter of small calculi, which escaped observation when voided. Ulceration and sloughing may also have been induced. He considers that in cases of pyonephrosis and paranephritis operative measures should usually precede the external bursting of the abscess, as the results of subsequent nephrectomy are not favourable; still where, as in this case, the adhesions are easily broken through and the kidney can be readily removed, this operation may fairly be undertaken in preference to that of nephrotomy, which, though it may result in a cure, requires a long time to effect it, and is besides very uncertain, its risks, too, being scarcely counterbalanced by the chances of a few of the glomeruli and pyramids being rendered capable of resuming their functions.

THE ST. ANDREWS GRADUATES' CONVERSAZIONE.

THE conversazione of the St. Andrews Graduates Association, held on Wednesday evening in Chandos-street, was largely attended, and was in every way a marked success. The guests—who were received by Dr. Richardson, F.R.S. (President), Dr. Paul (Treasurer), Mr. Menzies (Honorary Secretary), and Dr. Christie—included Mr. J. T. Wood, the explorer of the Temple of Diana at Ephesus, Dr. John Lowe, Mr. Hyde Clarke, Sir James Cockle, Dr. Ord, President of the Medical Society of London, Major Childs, Dr. Crichton Browne, F.R.S., Serjeant Robinson, Sir Patrick Colquhoun, Dr. Hack Tuke, Col. Brabazon, Mr. A. Wynter Blyth, Dr. Spencer Cobbold, F.R.S., and a very large number of graduates and their ladies and friends, who filled the rooms and took part in the enjoyments of the evening until a rather late hour. The chief feature of the evening, and a novel one, was an address by the Rev. Dr. Lansdell, D.D., the well-known Siberian traveller, on Bokhara and Khiva. The lecturer, who put on the grand Oriental dress which had been presented to him by the Ameer, gave some extremely curious and interesting facts about the nomadic tribes whom he had visited, and about some of the diseases to which they are subjected; and after speaking for nearly half an hour and answering many questions, received a most hearty vote of thanks on the motion of the president, who added a message from Dr. Schliemann, regretting that absence from England prevented him from being present.

A CASE OF TRAUMATIC ANEURYSM.

IN the *New York Medical Journal* for May 23rd Dr. Theodore McGraw of Detroit relates an interesting case of traumatic aneurysm of the subscapular artery. The patient was a Pole twenty-seven years of age, who received three stabs about the shoulder in December, 1881, one of which was followed by an enormous extravasation of blood that was in due course absorbed. Three years later he came under Dr. McGraw's care with a rapidly growing pulsating swelling in the axilla, which had all the usual characters of an aneurysm. There was no alteration of the radial pulse. Its increase in size was so rapid that treatment had to be resorted to at once. The first step of the operation was to make an incision above the clavicle, through which the subclavian artery could be compressed. A free incision was then made over the tumour, and carried through the pectoralis major muscle, and attempts were made to detach the thick sac of the aneurysm from the surrounding structures. When this step of the operation was about half completed, the sac ruptured, and thinking that the attempt to isolate it must be abandoned, the sac was freely laid open, and the mouth of the artery controlled by the finger; but after many efforts it was found quite impracticable to free the mouth of the artery and to throw a ligature around it, for the sac was formed of very dense tissue, and was firmly adherent around the wounded artery. Dr. McGraw thereupon returned to his original plan, and with ease separated the fundus of the sac from the ribs and the anterior and posterior walls of the axilla, and then ligatured its neck. After this the axillary artery was with comparative ease freed and tied above and below the origin of the subscapular branch, which was found to open into the aneurysm within half an inch from the parent trunk. Arguing from this case, Dr. McGraw advises that while Syme's operation is suitable for cases of ruptured artery, it should not be adopted for traumatic aneurysm where there is a well-formed sac. It is pointed out that it may be impossible from the interior of an aneurysm to free the artery sufficiently to ligature it without imperilling contiguous arteries, veins, or nerves, while the detachment of the sac may be a comparatively easy and rapid procedure if done systematically. A ligature can then be tied round the neck of the tumour, and all danger of hæmorrhage avoided, and if the fundus of the sac be cut away the field is comparatively clear for the final steps of the operation. It is undoubtedly a dangerous and difficult matter to clear an artery from the inside of the sac of an aneurysm, and where the sac is sufficiently dense to permit of it, the plan of operating prepared by Dr. McGraw offers decided advantages.

STATISTICAL SOCIETY.

THE Statistical Society intends to hold its Jubilee Festival on Monday next and the two following days. The meetings will be held in the theatre of the London University in Burlington-street, and, it is expected, will be attended by a considerable number of the most distinguished statisticians of Europe and America. The first meeting will take place on Monday at 3 P.M., when the president's address will be delivered, and papers read by Dr. Mouat, Mr. Giffen, and M. de Foville. On Tuesday the subjects of the papers will be "Uniformity of Statistics, and the Numerical and Graphic Methods," and on Wednesday Professor De Neumann Spallart will give a *résumé* of the results of the International Statistical Congresses, and sketch of a proposed form of International Statistical Association. From the names of the distinguished members and visitors by whom the papers are to be read we are justified in anticipating that they will be of high quality and likely to give rise to interesting discussions. The annual anniversary meeting of the Society and the jubilee dinner take place on Tuesday, and the Society gives a *jubilee conversazione* at the South Kensington Museum on Wednesday evening. The Lord Mayor has invited the council of the Society and the foreign visitors to luncheon at the Mansion House on Monday previous to the meeting at Burlington House.

STRAPPING THE TESTICLE.

AT a recent meeting of the New York Surgical Society Dr. Post mentioned a case of gonorrhœal epididymitis, in which he had employed strapping the testicle in the subacute stage. The President of the Society, Dr. Weir, opened the discussion on the case, and expressed an opinion adverse to the value of this means of treating swelled testicle, and in this opinion he was supported by several subsequent speakers. Dr. Post, however, strongly contended for the value of this old-established treatment. We believe that, were the subject raised at any of our British Medical Societies, a similar difference of opinion would be found to exist. There is no doubt that it is not an easy matter to strap the testicle well; even the preliminary process of shaving the scrotum is not a simple matter, as anyone who for the first time attempts to do it thoroughly quickly learns. The circular turn of strapping round the spermatic cord is liable to cut into the thin skin, and eczema of the scrotum is not an infrequent result when strapping is placed next the skin. When lint is placed between the skin and scrotum, it is apt to be thrown into folds by the firmer strapping and to lessen the equable pressure of the latter. However, by care and the skill obtained by practice, it is quite possible to get over all these difficulties, and, either by the use of a thin elastic bandage or of a linen bandage beneath the strapping, to apply firm and equable pressure to an enlarged testicle. The advocates of this plan of treatment may fairly attribute much of the opposition to it to the difficulties met with in carrying it out and to the failure to overcome them. But we must not imagine that this explains it all. There is no doubt that in the great majority of cases of epididymitis strapping the testicle is neither required nor advantageous. As soon as the acute inflammation subsides, the inflammatory products are for the most part rapidly absorbed and leave but a trifling induration behind. It is only in cases where this does not occur, and where the epididymis continues considerably swollen, that circular compression is of real value, and in these cases it is very valuable. But it is particularly indicated in subacute inflammation of the body of the testicle itself. The treatment is most easily carried out when the organ is considerably enlarged, and it is in these cases that it is most useful. It cannot, of course, be attempted in acute inflammation; and in other cases we should say that the greater the swelling of the organ—the larger the amount of inflammatory exudation to be absorbed—the greater is the value of strapping the testicle. In other words, the easier to apply, the better the effect.

UNAPPRECIATED THRIFT.

At the recent annual meeting of the Medical Benevolent Society at Birmingham, the President made some remarks which deserve the attention of a wider circle than those who chanced to be present. After an existence of sixty-four years the Society has accumulated an invested capital which amounted to £10,705 on Dec. 31st last, and is steadily increasing. Registered medical practitioners within fifty miles of Birmingham are eligible as members of this Society, and within that radius upwards of 900 practitioners are included; yet at the close of last year only 264 members were on the books. Cases not unfrequently come to the knowledge of the Court of Directors urgently requiring assistance, when it cannot be rendered legally because membership had not been sought in due time; yet the subscription is at the [illegible] £2 1s.,—£1 1s. a year for twenty-one years, or £10 10s. if paid in one sum on admission. As, happily, only a small minority of members, or their families, come upon the funds, the Court is able to deal liberally with those who do; and the cases are not few in which sums varying from £20 to £40 a year are given for a great number of years. The excess of total income over total expenditure has for the last five years averaged £248 per annum; and the results prove that the widows of three members, whose entire payments were only £38 7s., received from the Society's funds no less an aggregate than £2927 10s. The radius of fifty miles from Birmingham, within which practitioners have a right to claim membership, includes nine county towns—viz., Derby, Hereford, Leicester, Lichfield, Northampton, Shrewsbury, Stafford, Warwick, and Worcester; also such industrial centres as Burton-on-Trent, Coventry, Dudley, Newcastle-under-Lyme, Walsall, and Wolverhampton. It is computed that over this wide area something like 700 additional practitioners might claim their admission to the Medical Benevolent Society, which is conducted on such principles as to allow of wide expansion in its operation, with the most perfect safety. The Society is registered under the Friendly Societies Act, and the secretary, Dr. Thomas Savage, of Newhall-street, Birmingham, will be happy to supply the fullest information to all eligible for membership. It being a point of honour with the directors and officers to observe the strictest confidence as to the name and position of the persons relieved, the Society cannot claim sympathy for special cases. Were it otherwise, the process of recruiting members might be easier. It is difficult to imagine in what apparently unlikely cases the funds of the Society become urgently needed for relief. When that becomes known, not an hour is lost in giving the necessary instruction to the treasurers, and they never lose a minute in giving it effect. These facts fairly entitle the thrifty Midland Medical Benevolent Society to a wider appreciation than it has yet enjoyed.

LYMPHO-SARCOMA OF TONGUE.

THE paper which Mr. Hutchinson contributed to the Royal Medical and Chirurgical Society on Tuesday last was one of much clinical and pathological interest. The case was that of a medical student who had had a morbid condition of the tongue, if not from birth, at all events from early life. The morbid condition would appear to have been one which, with Mr. Hutchinson, we may regard as a "congenital mole," having a tendency also to a nævoid condition. Such hypertrophies of lingual tissues are not in themselves of very rare occurrence, but they are nevertheless of much importance as clinical objects of study in addition to their pathological relations, and the remarks on their structure by Mr. Butlin and Mr. Barker were of much value. The chief point raised by the paper in question would appear to be the development of a sarcomatous tissue in the ordinary course of the life of this hypertrophic condition. To all appearances the case which formed the chief part of Mr. Hutchinson's paper was one in which, in the first period of its existence, the disease had no malignant characters. And even later on, when the patient was first seen in London, there was nothing except the size of the tumour to excite much alarm about it. There was no ulceration and no glandular affection. The removal of the very large if not the largest tumour of the tongue on record (weighing seven ounces), could only be effected by a division of the lower jaw and preliminary tracheotomy. The operation was successfully accomplished, and the patient enjoyed the next two years of his existence apparently in the best of health. The microscopical examination alone caused any ground for alarm, for such skilled microscopists as Dr. Klein, Mr. Butlin, Mr. Godlee, and Mr. Eve all testified to its sarcomatous nature. And they were right. At the end of two years the growth recurred at the cicatrix, and caused death by its rapid development. The case is one of much interest on account of the great size of the tumour, the great rarity of sarcoma of the tongue, and also as an illustration of the occurrence of malignant disease on the top of a congenital and apparently innocent hypertrophy of certain of the lingual tissues.

LUNACY CERTIFICATES FOR CLUB PATIENTS.

THE practice of club surgeons with regard to certificates required by members for purposes unconnected with the club or with their ordinary employment differs considerably, for while some surgeons are willing to give any number of certificates to enable a man to draw sick pay from other clubs with which the surgeon has no connexion, others make a practice of charging a small sum for such services. It would certainly be better if some common system were agreed upon regarding payment for club members' certificates, or if a definite agreement were made with clubs at the time of taking office. A case illustrating the importance of this has just come before Judge Pitt Taylor at the Woolwich County Court. A family had been entered many years ago as medical aid members, paying a penny a week each to one of the large industrial insurance companies. When the company gave up its medical aid branch, a private arrangement was made with the surgeon and the agent to continue it on the same terms as before; this was understood to entitle the members to attendance and medicines except during confinements. Recently one of the daughters became deranged, and it being necessary to send her to an asylum, the club surgeon filled up a form, another practitioner doing the same. The latter gentleman's fee of a guinea was paid without hesitation, but when the club surgeon sent in a claim for a similar amount, it was refused on the ground that the weekly payment covered it. As the surgeon took a different view, it was arranged in a friendly manner to test the case in the county court, with the result that the judge held that the medical officer of a club is bound to give *any* certificate required by a member, even a certificate in lunacy. He believed, however, that this was the first time the question has been raised. As this is not the view taken by medical men generally, it would be well to have the judgment of a superior court, but we understand the medical man concerned has no intention of appealing.

THE ÆSCULAPIAN SOCIETY.

ISLINGTON has long had a good Medical Society, founded by its best local practitioners, Cattlin, Clifton, Jackson, Kesteven, and others, and to which they and their younger neighbours brought the best of their experience; and this Society continues still to thrive. Perhaps not the least proof of its vitality is the appearance of a very vigorous offshoot of the old tree, yclept "The Æsculapian"—differing from the older Society in meeting in other than private houses, where the severities of the drawing-room need not hinder the odour of the morbid specimen or the more attractive odour of the "weed," whose devotees claim for it that it loosens the tongue, sharpens the brain, and makes a society ever so much more social. The Æsculapian has justified its existence in more ways than by the innovation of smoking, notably by a volume of Transactions containing some very excellent contributions on subjects in every department of medical practice. The annual dinner of the Society was held on the 5th inst., in the Holborn Restaurant, under the most genial presidency of Dr. Lough, when the Society showed a wonderful richness in musical and social qualities, and gave to guests the impression that it was a very creditable representation of the body of general practitioners, of which it boasts to consist almost exclusively.

INFECTIOUS DISEASE AND SCHOOL ATTENDANCE.

ONE of the chief considerations in the working of a general and compulsory system of education is its adaptation to the case and circumstances of particular scholars. Proof that some degree of pliancy is necessary is furnished by the evidence brought forward some time ago of the unequal pressure of a common method in teaching, and this has paved the way for certain measures of reform. Another difficulty which has to be allowed for, but might be thought too obvious for regulation, presents itself in the very frequent prevalence in childhood of infectious fevers. It would seem, however, that some recognised rule for such cases is still wanting. Thus, in an instance lately reported the mother of a family, several of whom had measles, felt herself obliged to send one of her children to school out of the infected house in consequence of repeated notices from the School Board officers. The latter, we presume, were imperfectly informed as to the facts. Let us now recall the usual surroundings of such a child. His home very frequently consists of one room, the hospital for the time being of sick brothers and sisters. If the family be large, it may occupy a flat. The rest of the house is probably tenanted by another family or more than one, healthy or not. In any case, the amount of house-room will vary with that somewhat uncertain quantity, the father's work. Disinfection, fortunately far more common and more easy than formerly, gives no absolute immunity, nor, indeed, is it always resorted to. Then we have to remark the danger to others implied in the vagueness of the symptoms of invasion. During this period infection is mustering its forces almost unobserved; and it is then that measles in particular is most infectious, though still obscure. The mere statement of these facts should convince one that the apparently sound member of an infected family cannot safely mix with other children unless he live separately while at home. We have shown how difficult it is to obtain this separation. It has accordingly been long recognised by other than Board schools, that where isolation of the sick is impossible the healthy children cannot attend school. Without a provision of this kind, schools in general, and especially the National and Board schools, must become in a greater degree than they now inevitably are starting-points for many cases of contagious and infectious disease.

TAXATION OF BEER OR TEA.

MR. JOSHUA FIELDEN is at serious variance with Mr Gladstone and Sir Charles Dilke in reference to the amount of the existing taxes on beer and tea respectively. W cannot pretend to decide when such doctors disagree; bu we must express our decided preference for increasing th taxation on beer and spirits as compared with that on tea The plain facts on this subject are the best for purposes o guidance. The present taxation of beer is not enough t hinder the consumption of an amount of it altogether i excess of the physiological or dietetic requirements of th body. It stiffens the joints and besots the intellect of th labouring classes, who are now to acquire such momentou functions in the State. To talk of taxing the poor and no the rich with an income tax of eightpence in the pound i slightly suggestive of uncandour; but in the interest of th working classes and of the State alike, let us tax articl that can well be spared, and not articles of refreshing die

SUCCESSFUL PORRO'S OPERATION.

La Gazzetta degli Ospitali of the 7th inst. reports th Professor G. Calderini performed Porro's operation on th 10th ult., in the Gynæcological Institute of the Universit of Parma, on a woman greatly deformed by rickets. Th operation was performed several days before the labou period, and Porro's method was slightly modified. On ex posing the uterus, a small transverse *incision* was made int it, and the uterine tissue torn in the same direction wit the fingers. The pedicle was constricted with an elasti ligature, and fixed to the abdominal wound by long inter secting needles. The superficial sutures were removed o the fifth day, and the deep ones on the eleventh, union by first intention having resulted. The third dressing wa renewed on the eighteenth day, and the fourth on th twenty-first; the pedicle, not having then become completely detached, was divided. The patient's highest temperature was 37·5° C. The child is alive and well.

TAPEWORMS AND HYDATIDS.

AT the soirée of the Royal Society held last week thi subject was pretty fully illustrated by a series of pre parations exhibited by Dr. Cobbold. Amongst the mor interesting specimens were a set of slides of Tænia echino coccus, kindly lent for the occasion by Dr. J. Davie Thomas, in illustration of his paper "On the Rearing o this Tapeworm by feeding Dogs with Human Hydatids. Specimens were shown of thirty-two and forty-two day old respectively. To compare with these, Mr. Edwar Nettleship's Tæniæ, forty-seven days old, reared by feedin [illegible] hydatids from a sheep, were also shown. Dr. Cobbold supplemented these by exhibiting three other kinds of canine [illegible], which he reared by experiment from their appropriate scolex forms. Several varieties of hydatids, such as Echinococcus hominis, E. veterinorum, and the rare E. multilocularis were included. The completeness of the series will be better understood by the enumeration of the canine and feline tapeworms shown—Tænia marginata, T. serrata, T. litterata (often called T. canis lagopodis), T. cucumerina, and also the variety known as T. elliptica, T. cœnurus, T. crassicollis, Bothriocephalus latus, B. cordatus, B. dubius, and B. felis. Several of the slides were originally contributed by Professor Leuckart of Leipzig and Dr. Krabbe of Copenhagen. The last parasite on this list was only recently identified from amongst a set of entozoa contributed by Dr. Bancroft of Brisbane.

LEUCOMAINES.

In the *Bull. Soc. Chim.*, A. Gautier, writing on the action of bacterial ferments on albuminoids, by which certain poisonous alkaloids are produced, says that these seem to be identical with those commonly known as ptomaines; and proposes that, as they are constant and necessary principles in the normal excretions of living organisms, and have been detected in the saliva, urine, muscular juices, sweat, and also in numerous glands, they should be called "leucomaines" ([illegible], the white of egg). They are mostly poisonous, crystalline, and give crystalline platino-chlorides.

EMETICS IN CASES OF FOREIGN BODIES IN THE AIR-PASSAGES.

A. Häcker mentions in the *Vrach* some cases of foreign bodies in the air-passages. In one of them the patient, a child of five years of age, had been given a powerful emetic by a "feldsher" (a hospital sergeant), and when Dr. Häcker arrived the child was almost moribund. He thinks that, as a rule, emetics do no good in these cases, and may produce serious mischief.

SOME OF THE CHEMISTRY OF CHOLERA.

An investigation of the changes which epidemic cholera produces in the bile and alvine dejecta has been conducted by M. Gabriel Pouchet. The author has made six analyses of bile collected from the gall-bladder very soon after death from cholera. A large proportion of albumen was found in the glutinous fluid. The albumen forms, with the mucin, the greater part of the residue resulting from evaporation. The bile was very watery. In every case the presence of leucin, tyrosin, glucose, and fatty globules mixed with fatty acids and cholesterine was detected. After separation of the albuminoid matter by strong alcohol, the colourless liquid precipitated by acetic acid become slowly coloured of a brownish-green. The precipitate produced by acetic acid is formed of cholic and choloidic acids and dyslysin, which shows that a decomposition of biliary salts may take place in the gall-bladder. The alvine excreta were almost [illegible], very watery, and contained a considerable proportion of [illegible] and chloride of sodium. The vomit frequently contained the elements of bile. Ptomaine extracted by [illegible] with chloroform presented itself as a colourless liquid, having the characteristic odour of pyridic bases, changing in air and light with great rapidity, and acquiring a [illegible] colour, and afterwards a brown. A marked [illegible] reaction is given, it forms a chlor-hydrate which [illegible] by elevation of temperature or in a vacuum. Attempts to purify the alkaloid were made, but the purified product had but little toxic effect when injected under the skin of guinea-pigs, though the original [illegible] killed a frog in less than two hours.

It is stated that Lord Shaftesbury, in view of the extreme improbability of the Lunacy Acts Amendment Bill (to certain clauses of which it will be remembered he strongly objected) becoming law during this session, has consented to resume his position as chairman of the Lunacy Commission. As regards any future proposed legislation on the subject, his lordship is understood to have reserved to himself complete liberty of action.

The outbreak of small-pox which has taken place at Burslem has spread to other districts, and serious alarm is experienced in the other towns of the Potteries, which are all grouped together. The Sanitary Committee of the Burslem Town Council, recognising the special importance of isolation, have ordered two more hospital tents, to contain twelve beds.

We learn that, a memorial having been recently forwarded to the Home Office from medical practitioners of Derby praying for the release of Dr. Bradley, Sir Wm. Harcourt has replied to the effect that, having considered all the circumstances, and consulted with the judge who tried the case, he does not see ground for interfering on the prisoner's behalf.

The members of the United Faculties' Club of the University of London dined together on the 17th inst. at the Star and Garter Hotel, Richmond. Dr. Langdon Down occupied the chair, and was supported by Sir John Lubbock, Dr. Storrar, Mr. Cooper Forster, Dr. Bristowe, Mr. J. G. Fitch, Mr. Magnus, and others.

The patient from whom Sir Henry Thompson recently removed by the supra-pubic method a calculus composed of pure uric acid weighing 14 oz. avoirdupois, as recorded in our issue of May 2nd, has made, we learn, an excellent recovery. Full details of the case will be published in our columns in due course.

The *Revista de Pharmacia e Drogaria* of Rio de Janeiro states that a free school of pharmacy has been founded by the Pharmaceutical Institute of that city, and is to be maintained at its expense.

Dr. Monochovez, prosector in the University of Moscow, has been appointed Lecturer in Physiology in the Forest Academy of Petrovski.

THE HOSPITAL SUNDAY FUND.

The total amount received on behalf of the Metropolitan Hospital Sunday Fund up to the time of our going to press is £13,450 13*s.* 5*d.* Many amounts are less than those paid from the same places last year, but there are on this occasion several new contributors.

The following are the principal contributions which have so far been received on behalf of the Fund:—St. Michael, Chester-square (Canon Fleming), £251 4*s.* 6*d.*; St. Jude's, £702 4*s.*; Westminster Abbey, £195 7*s.* 8*d.*; St. Paul's Cathedral, £161 6*s.*; Union Chapel, Islington, £100 17*s.* 8*d.*; Metropolitan Tabernacle, £[illegible]; Great Synagogue, £240; St. Mark's, North Audley-street, £218 5*s.* 2*d.*; St. Margaret's, Westminster, £172 19*s.* 6*d.*; The Temple Church, £172 14*s.* 5*d.*; St. Barnabas, Kensington, £[illegible] 7*s.* 2*d.*; Quebec Chapel, £256 7*s.* 3*d.*; Messrs. Reid and Co. (a further donation), £200; St. Andrew's, Wells-street, £110 12*s.* 2*d.*; St. Mary's, Bryanston-square, £108 10*s.*; St. James's, Piccadilly, £120 10*s.* 3*d.*

A correspondent calls our attention to the case of St. Peter's Church, Vere-street, where the annual collection now averages more than £200, whereas when the present incumbent (the Rev. W. Page Roberts) took office the sum contributed by the congregation was only about £[illegible].

REPORT
OF
The Lancet Special Sanitary Commission
ON
MARSEILLES AND TOULON.

No. I.

From Toulon and Marseilles the cholera has menaced all Europe. The public opinion of England, as well as of France, has therefore some right to urge the duty of adopting measures likely to prevent these towns becoming once more a source of special danger to the entire European community. While the epidemic lasted it could not be expected that the authorities would undertake any important public works. To nurse the sick, to observe, as far as possible, the cause and history of each case, and to disinfect in a wholesale manner, sufficed for the moment. Now, however, a year has elapsed since the first outbreak of cholera at Toulon. A long winter afforded the necessary time to select and enforce the sanitary improvements most suited to meet the risks of the present summer. Already two cases of cholera are reported from Marseilles. This would be a matter of little importance if, in the interim, energetic precautions had been adopted. The lesson to be derived from last year's epidemic was sufficiently severe to justify the hope that it would not remain unheeded. Unfortunately at Marseilles, internal strife and factious divisions within the ranks of the municipality seem to have paralysed the authorities. They display more eagerness in denying the evil than in seeking its remedy. Nor is local public opinion sufficiently enlightened on sanitary matters to bring a wholesome pressure to bear upon the administration. The town still remains in a deplorable condition. Little or nothing has been done. Faith in the efficacy of quarantine regulations survives the late deplorable experiences, and yet the means taken to purify infected ships are altogether untrustworthy.

We carefully inquired from the port sanitary authorities what system of disinfection was enforced, and ascertained that the purification of ships was left very much to the discretion of the captain. In many cases it simply meant a good wash down, with the use of a little disinfectant solution. Thus there is no security whatever that the disinfection is absolute and capable of killing every known living organism. When fumigation is practised on board ship it seems to be the custom to wash first and fumigate afterwards, thus exposing the operators to considerable risk of contagion. On the other hand, the quarantine station formed by the union of the Pomègue and Ratoneau islands is better organised than was reported at the time. Contrary to what was then said, the new arrivals did not have any intercourse with those who were about to leave; while the general installation of the quarantine station, which the courtesy of Dr. Marrion enabled us to visit carefully, offers many and great sanitary advantages. The site is most healthy and beautiful, and the accommodation ample and economical.

With regard to the town of Marseilles itself, it should first be noted that the water-supply is exceptionally abundant. Strange as it may seem, however, this very abundance has given rise to a danger on which we cannot insist too strongly. The amount of water distributed being more than sufficient to fill the cisterns, these latter were supplied with overflow pipes that communicate with the drains. In many cases the cistern is placed uncovered in the closet, and such connexion with the drains offers more than usual risk. It is needless to say that traps are utterly unknown. At the bottom of the soil-pipe there should be a *tinette* to retain the solid material, but as a rule this is not used. The pipe continues under the house till it reaches a sort of catchpit placed under the causeway of the street; here the water deposits more than a cubic metre of solid matter, while the liquid from the surface of this little cesspool overflows into the sewer. There is no dip-stone in this catchpit, so that it does not act as a syphon, but the emanations from the sewer, from the catchpit, and the huge insufficiently flushed drain-pipes travel back unhindered into the apartments and into the cistern that holds the drinking water. Thus is the excellence of the Marseilles water-supply compromised. Surely the overflow pipes from the cisterns could be trapped with but little difficulty or expense. The catchpits might also be abolished, and as a temporary measure *tinettes* or movable pails employed in their stead. The fear of solids reaching the sewer is sufficiently obviated by the wire filter of the *tinette*.

These remarks, however, only apply to the more modern and wealthier parts of Marseilles. In the old town and poorer districts there are no such innovations as closets, catchpits, *tinettes*, or soil-pipes. It is doubtful whether there existed a single closet in Marseilles before the Revolution of 1848. It was and still remains the custom for the inhabitants to empty their vases into the gutter, though some throw everything from the window into a back yard, where it forms a foul manure heap till such time as it attracts the attention of a particularly bold and conscientious scavenger. Altogether Marseilles possessed at the time of the epidemic 48,000 metres of sewers, but the streets of Marseilles reached the total length of 225,000 metres. M. Guérard, the port engineer, has carefully dotted on a large map of the town every known case of cholera. The sewers are also drawn on this map, and we are thus able to realise at a glance that all the roads where sewers existed were remarkably exempt from cholera. This rule does not only apply to the large and well-ventilated streets, but also to narrow, poverty-stricken thoroughfares such as the Rue de la Guirlande, which runs through the old town from the Hospital to the Mairie, and is the only street in this part of Marseilles that possesses a sewer.

From these striking facts we cannot, however, conclude that sewers suffice to prevent cholera. The absence of sewers did not alone contribute to facilitate the outbreak of cholera. It was also noted that the disease prevailed with greater intensity in the streets paved with round knobbly little stones that readily allowed the moisture to sink into the earth. As the soil is either thrown directly into the streets or finds its way to the gutter after filtering through a *tinette*, which only retains a portion of the solids, it will be readily understood that the more porous the road the more thorough the infection of the ground. Also all private wells are not yet abolished, and, being dug in ground which has received the filth of ages, their water is highly contaminated. The marked decrease in the death-rate of Marseilles when the purer water of the Durance was first introduced is a clear proof of the dangerous nature of private supplies, and the abolition of wells should not be allowed to remain an optional matter. Not only in the town, but also in the suburbs, it will be found that most cases of cholera come from streets or districts that presented special sanitary defects. Thus, at the lunatic asylum Dr. Pons, who was in charge of the male wards, failed to trace any case of direct transmission. Every suspicious case of diarrhœa, &c., was transmitted to a ward of observation. Nearly all whose symptoms developed into true cholera came from the epileptic wards, where, apart from the naturally uncleanly habits of the patients, the drainage and ventilation are exceptionally bad. Others coming from more wholesome parts of the building, which contains altogether 1100 patients, soon recovered, and did not contract the cholera from the true cases with which they had mingled.

A little further on, in the suburb of the Capelette, nearly all the cases seemed connected with a little stream that winds in and out of the village. This stream, about a yard wide, is quite clean on entering the village, but on leaving the village we measured more than a yard deep of greasy, black, foul mud at the bottom of its bed, and the water was of an inky colour. The habits of the inhabitants of the village are filthy in the extreme. In some houses, where the brook passed under the kitchen or basement, a little hole was made in the floor. This served as the family closet, and was proclaimed a convenient and cheap way of getting rid of all soil, slop-water, and other refuse. In a rambling building, subdivided into sixteen tenements, where twenty cases and fifteen deaths occurred, we observed that the only accommodation consisted of a large masonry box or tank capable of holding four cubic metres of soil. This receptacle was wholely uncovered, was infested with thousands of flies, stank abominably, and its fæcal contents were constantly stirred up as each tenant came to empty his vase into this substitute for a watercloset. Crossing the main street, we visited a house where the brook ran down the side of the back garden. Here there were two wells; one within a yard and a half of the brook supplied the drinking-water, though it sometimes "smelt nasty"; the other well, a little farther off, and perhaps less contaminated, was not used because a dead baby had been found in the water. Two deaths from cholera were noted in this house. In the middle of the garden, and touching the brook, was a wooden donkey-shed and what was called the closet. It simply consisted of a hole about a foot deep dug in the earth, where the soil remained exposed to the sun, the liquid portion filtering through the earth into the brook. At the farther end of this back yard or garden we entered a sort of barn, where eighteen Italian labourers were allowed to sleep on straw. Among these latter there were two more deaths from cholera. Another house, which had been specially visited by M. Clemenceau, and in which nine cases and seven deaths are stated to have occurred, disposed of its sewage in a sort of well dug in the middle of the first out of two back yards. The soil being porous absorbed whatever was thrown down. In the second back yard two little wooden huts were built, measuring each two metres. They were just big enough to hold a bed, and were separated from each other by a foul midden. Here, exposed to the rain, the foul stenches, the damp from the saturated and poisoned soil, protected only by a few slender boards, wretched people slept, sometimes three in one bed. This abominable state of affairs is all the more reprehensible, as it is due solely to the supineness of the authorities. Without any extra expenditure of money or the enactment of any new law, it could at once be abolished. A regulation already exists to the effect that every house that is not provided with a cemented and ventilated cesspool shall employ a *tinette* or movable pail. To carry out this regulation, a contractor is ready to supply a clean, empty *tinette* every week, removing the pail that is full, for the very moderate charge of sixteen shillings per annum. Yet, in spite of this facility, the proportion of houses at the Capelette provided with *tinettes* amounts to only 44 per cent. of the total number.

During the epidemic the greatest courage and devotion were displayed. A help committee was constituted that penetrated every centre of infection and rendered practical assistance to those who were suffering. The members of this help committee were modest, simple, brave men, unknown to fame, and who have had little or no share in the decorations and honours showered upon the town by the Government. At the Capelette, M. Vaud, a working builder, was foremost in doing whatever was most unpleasant yet most necessary. But now that the epidemic is over these men have retired from the scene, and matters have relapsed into the same abominable condition which so favoured the outbreak of cholera. A huge sewer, projected five years ago, is now being constructed at the Capelette; and in the town, at the cost of £12,000, three thousand metres of sewers are being added to those that already exist, yet this is all done without any general scheme of drainage. Pending the adoption of some definite system, and the gathering together of the enormous sum necessary for its realisation, it would be more practicable to enforce the due observance of such regulations as do exist. What we term the pail system is actually applied to a large number of houses in and about Marseilles. It is a method that affords many advantages; some hygienists even go so far as to consider it the safest of all systems, and its application is susceptible of rapid extension. By closing the overflow allowed in some of the *tinettes* we have perfect pails, and their removal every two or three days will secure the town against a continuation of the present wholesale contamination.

One sewer at the Joillette, another at the Prado, have their outfalls into the sea; all the rest flow into the old port, and bring so much refuse down that the harbour has to be dredged every year, and something like 70,000 cubic metres of solid deposit taken out. The water is foul in the extreme, and both typhoid and cholera among the sailors sleeping on board in this old port was the natural result. The gutters, which contain the greater part of the house drainage of Marseilles, likewise empty into this basin. M. Guérard, in his able report, proposes to construct a large main sewer round the port, but at a sufficient distance and elevation from the water to enable its contents to run eastward and empty by gravitation into the sea outside the town. On the port itself a much smaller sewer would receive what came from the lower portion of the town situated below the projected main sewer. At a given point the contents of the smaller sewer would have to be pumped up into the main sewer. These two sewers would cost about £48,000, and would, in any case, prevent the contamination of the port. Unfortunately, even this partial reform is not yet adopted.

THE TEACHING UNIVERSITY FOR LONDON: CONFERENCE OF MEDICAL DELEGATES.

THE third and concluding meeting of the Conference consisting of the Sub-committee for the Faculty of Medicine of the Association for promoting a Teaching University for London and the delegates of the various medical schools was held on Monday last, when the subjoined report was agreed to. After enumerating the members of the Conference the report runs thus:—

"The outline of the plan for a Teaching University was submitted to as follows: That it should be founded on (1) Faculties as constituent bodies; on (2) Boards of Studies representing the Faculties; and on (3) a single Governing Body.

"We approve of this plan, subject to the following observations:—

"1. The Faculty of Medicine should consist substantially of the teachers in the recognised schools of medicine, whether lecturers or clinical teachers, and whether in the strictly professional or scientific subjects. Some points of detail arising out of the special circumstances of schools may be left for settlement hereafter, it being understood that the intention is to put a liberal construction on the qualification for the Faculty in regard to those actually engaged in teaching. The examiners appointed by the University should also be members of the Faculty, whether actually engaged in teaching or not. The power to appoint additional or extraordinary members of the Faculty should be reserved to the Faculty. We consider that this power would be especially beneficial in the case of retiring members of the teaching staffs.

"2. The Board of Studies should be appointed by election, and not by nomination. There exists among us some difference of opinion on the question whether all elections to it should be by the whole Faculty collectively, or whether it is desirable to provide for some special representation on the board of the several recognised schools of medicine. We are agreed, however, to recommend that each school shall be entitled to return one member to the board, to be appointed by those members of the Faculty who belong to the school. Those of us who most strongly feel the need of keeping the elections as open as possible, consider that the existence of a desire for this amount, at least, of separate representation is a sufficient argument for conceding it; and, on the other hand, those who consider that under the existing conditions of the schools some separate representation is necessary, are content that the rest of the elections to the board should be open to the whole Faculty without restriction. The representation of particular classes of studies will, it is thought, be sufficiently cared for by the Faculty in electing. It is, however, very important to the successful working of the system that the board should have the power, and should use it freely, of formal consultation with other members of the Faculty in regard to special matters and particular studies. The benefit of the presence of examiners in consultation when the arrangements for examinations are under consideration is an instance of this; but provided they are regularly summoned to consultation on these occasions, we do not think it necessary in view of the difficulty of including them all, or of satisfactorily providing for a representation of them, that they should be *ex officio* members of the board, or be separately represented on it. The number of the board should be not less than twenty or more than thirty. Power should be reserved to boards of studies to consult, when necessary, with those of other Faculties.

"3. Of the governing body it is essential that at least one-third should be representatives of the Faculties, elected by their boards of studies, or, perhaps, in part by the Faculties direct. If any are elected by a Faculty direct, they should also be members of the board of studies of that Faculty.

Supposing the number of the governing body to be fixed at from twenty to thirty, not less than three elected members should be appointed from the Medical Faculty. It is very desirable, with a view to the union of the examinations of the University in one system with those of the Royal College of Physicians and Surgeons, that room should be found in the governing body for representatives of these Colleges; and that arrangements should be made by agreement between the University and the Royal Colleges for the joint conduct of examinations under a common administration, so far as they deal with the same subject matter and with students at the same stages of their career.

"All seats on the governing body and on the Board of Studies should be held for a term of years only.

"In reference to the functions and work of the proposed Teaching University, we desire to call attention to the following points:—

"1. We think it desirable, in regard especially to the scientific branches of medical education, that arrangements should be contemplated whereby, under the guidance of the Board of Studies of the Medical Faculty, without impairing the autonomy of the several schools, some concentration may be effected of the teaching in particular studies, but subject always to the provision of a sufficient number of centres to meet the circumstances of the case.

"2. It appears to be desirable to contemplate the foundation of chairs in this University (whether attached or not to any existing institution) with a view particularly to the prosecution of the higher and more specialised studies, adapted to those who have already taken their degree, and supplementary to the instruction provided by existing institutions."

Similar conferences are being held in connexion with the other proposed Faculties, and the result of their deliberations, with the action taken thereon by the executive committee, will probably be brought before a general meeting of the Association in the autumn, when doubtless a definite scheme of the University will be submitted.

THE SANITARY CONFERENCE AT ROME.

THE delegates to the Conference having returned from a visit to Naples and its neighbourhood, where they received an unbounded hospitality both from the Government and the local authorities, the sittings of the Plenary Conference were resumed on Friday, the 12th inst. Whether owing to the difficulty of securing sufficient unity of opinion amongst the different nations, or whether, as was alleged, with a view of enabling the several Governments to consider the conclusions of the Technical Commission, it was at once decided to ask the Italian Government to adjourn the sittings to a later date. Several important statements and documents were handed in to the President, and these will doubtless appear in the published Proceedings, but for the time being no opportunity has occurred for their discussion.

At a sitting on Saturday, the 13th, it was announced that the Government had assented to the proposed adjournment and had suggested that the sittings should be resumed on Nov. 16th. This was unanimously acceded to, and the Conference then came to an end.

So far the only proceedings registered are those of the Technical Commission, and they have certainly succeeded in eliciting the different opinions prevalent in Europe and other parts of the world as to the value of the several measures advocated for the prevention of cholera. Whether opinions so much at variance can ever be sufficiently reconciled to make it worth while to attempt the compilation of an International or even of a European code, remains to be seen. The British and Indian delegates left Rome during the course of the present week.

MARINE BIOLOGICAL ASSOCIATION.—A meeting in furtherance of the objects of this Association was held on the 13th inst., at Oxford. The aim of the Association is to establish one or more marine laboratories for naturalists on the coasts of the United Kingdom, such as exist at Naples and elsewhere. The fund already subscribed amounts to £8000, and £2000 more is needed. Cambridge University has subscribed £500, and Oxford is appealed to for a similar sum.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Builth Rural District.—Dr. Herring gives a satisfactory account of the progress made in improving the sanitary condition of this district. During 1884 the death-rate was 12·28 per 1000, only three deaths being attributed to zymotic diseases. Of three cases from typhoid fever which occurred during the year, one was that of the sanitary inspector, who unfortunately lost his life. Water-supply has been provided to the village of Erwood, and steps are being taken with regard to other villages where the supply is deficient.

Middlesex and Hertford Combined Sanitary Districts.—An interesting chapter at the beginning of the annual report of these districts discusses conditions which are common to all. After referring to the manner in which cholera is known to spread in this country, Dr. Saunders points out the risks which are caused by the use of open privies and the ease with which a remedy can be found by the substitution of pails. A strong objection is taken to the exclusion of storm-water from sewers, this exclusion being done on the recommendation of engineers whose sole object is to bring schemes of sewerage within such limits as would be acceptable to sanitary authorities. On this point Dr. Saunders writes that "water-carriage sewage will soon be a misnomer, and already the effect of the removal of this natural cleanser and carrier is that sewers stink, and that open ventilators, which are the most rational and the best method of ventilating a clean sewer, are objected to." Attention is directed to the unsatisfactory closet accommodation in parochial schools, in several instances the health of the children having suffered in consequence. Of epidemic diseases, small-pox has been specially rife in Rickmansworth, where, during the epidemic, 1100 persons were vaccinated. Reference is also made to the increased prevalence of diphtheria in the kingdom; two severe epidemics of this disease occurred at Totteridge and South Mimms, and in both the disease first appeared in children attending schools where the closets were seriously at fault. In several districts enteric fever made its appearance, certain cases in the neighbourhood of Bernard Heath, near St. Albans, being due to a contaminated milk-supply from a farm which had given rise at the same time to an outbreak in the city of St. Albans, and in the previous year in the London parish of St. Pancras. The report contains evidence of careful inspection of all the districts and of steady progress in the improvement of their sanitary condition. The recommendations which are made for this purpose are well considered, and if adopted by the local authorities will do much to add to the healthiness of the various localities. The population of these combined districts is 91,051 persons, and the death-rate for 1884 was 15·7. The number of infants dying under one year of age was 25·5 per cent. of the total deaths, and the zymotic death-rate was 7·8 per cent.

Borough of Preston.—The report of the medical officer of health for this borough records the high death-rate of 25·53 per 1000, being slightly below the average of the previous ten years. The deaths from all causes under the age of one year form 34 per cent. of the mortality; as regards other large towns, the infantile death-rate of Preston is higher than that of all towns but one—viz., Leicester. Mr. Pilkington points out the effect which burial clubs have had upon infantile mortality in other towns; he does not, however, express any opinion as to whether Preston has been affected in a similar manner. The mortality from diarrhœa occurred mostly amongst the children of the operative and labouring classes, those of the Irish being comparatively exempt, a result which Mr. Pilkington believes to be due to the fact that the latter are almost always fed at the breast. Bronchitis added largely to the deaths of infants, and this he attributes to their removal in the cold of the early morning from warm and ill-ventilated rooms, where they had slept, to houses in which they are nursed while their mothers are at work. The zymotic rate of mortality was 5·15 per 1000 of the population; small-pox was almost absent, but measles was very prevalent in the latter part of the year, and the diarrhœal death-rate was as much as 2·91 per 1000. During the year a house-to-house inspection was made in a number of streets, and the necessary improvements of houses carried out. It has been decided to commence a destructor for the consumption of dry ashes and market garbage, and it is expected that it will overcome one of the difficulties with which the town has to contend. Special attention was given to the ventilation of the sewers, and the question of the erection of a public abattoir is receiving the attention of the sanitary committee.

Preston Port District.—Dr. Fisher reports that the attention of the authority was directed by the Local Government Board to the need for the inspection of shipping in view of the prevalence of cholera on the Continent, and Dr. Blaxall visited the Port for this purpose. There was, however, no importation of an epidemic or infectious disease during 1884.

Lytham Urban District.—This district has a population of 4373 constantly resident in the town, and during the year 1884 there were eighty-one deaths, giving a death-rate of 18·5 per 1000. The rate of mortality from zymotic diseases was only 1·1 per 1000, calculated upon five deaths from this class of disease. This is perhaps fortunate, for Dr. Fisher reports that the town is still without a disinfecting chamber for the purpose of disinfecting beds and bedding after infectious diseases. Only six cases of scarlet fever came under observation, and all occurred amongst visitors, and in all cases, as far as could be ascertained, the disease was imported. During the latter part of the year an epidemic of measles prevailed, but no deaths resulted. Houses and cottages, slaughter-houses and bakehouses, have been inspected, and an improvement effected in the drainage of one portion of the town where the sewer was specially defective.

Tendring Rural District.—It is estimated that the population of this district is 25,141, and during last year there were 411 deaths, giving a death-rate of 16·3 per 1000. The infant mortality is greater owing to an increased number of deaths from pulmonary affections and diarrhœa. This increase is attributed by Dr. Cook in part to improper feeding. A list of cases of zymotic diseases is given so far as they were known, but the zymotic death-rate is not calculated. Reference is made to five cases of typhus which occurred at Frating. These were, however, related to others which showed themselves in the previous December, and were fully commented on in the report for that year. The two diseases most prevalent in the district were measles and whooping-cough. The report points out the need for a system of sewers in several parts of the district, particularly at Bradfield and Parkeston; at Brightlingsea, where the sewers are also very defective, Dr. Cook recommends the tub system, so as to prevent injury to the oyster beds. At Clacton-on-Sea the new sewers are now completed, and satisfactory arrangements have been made for flushing them. Dr. Cook, however, does not regard their ventilation as perfect. The water supplied by the Clacton-on-Sea Water Company was found on analysis to be of very good quality.

Belper Rural Sanitary Authority.—In the Alfreton sanitary district there are 17,000 persons in thirteen different parishes, the death-rate in the total number is 12·96 per 1000, and varies in the different parishes from 4·17 to 18·91. In several villages efforts have been made to improve the water-supply by deepening the wells and protecting them from surface pollution. In one village typhoid fever occurred, and the locality of the disease is described as "a very unhealthy one by reason of the general filth and squalor of its surroundings." In this outbreak two persons died. There were but three other deaths from diseases of the zymotic class in the whole district. Mr. Gaylor reports that there is no hospital or means of isolating infectious diseases, and that a portable disinfector is much needed. Mr. Allen, medical officer of health to the Belper district, points out the need of a system of notification of infectious diseases, and for a central infectious hospital or cottage hospitals in different parts of his district. The water-supply to South Wingfield is described as scanty, and at the present time the inhabitants of the hamlet of Overthorpe are drinking water which is liable to contamination from the overflow of a brook which receives sewage from the town of Alfreton. The condition of the outfall at the sewage tank at Belper has caused much anxiety, attempts at purification having failed, and it is now proposed to change the position of the tank so that the effluent should be conducted over an open bed. The death-rate during the year is 13·7 per 1000, calculated upon a population of 17,626. The mortality of children under five years of age is considerably more than one-third of the total number of deaths. The zymotic disease during the year which has been most fatal was whooping-cough.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5563 births and 3168 deaths were registered during the week ending the 13th inst. The annual death-rate in these towns, which had been equal to 21·1, 21·0, and 20·5 in the preceding three weeks, further declined to 18·6 last week, a lower rate than has prevailed in any previous week of this year. During the first ten weeks of the current quarter the death-rate in these towns averaged 21·4 per 1000, against 22·3, the mean rate in the corresponding periods of the nine years 1876–84. The lowest rates in these towns last week were 10·5 in Derby, 13·7 in Sunderland, 14·2 in Halifax, and 14·5 in Wolverhampton. The rates in the other towns ranged upwards to 23·7 in Sheffield, 26·5 in Manchester, 28·1 in Plymouth, and 35·4 in Newcastle-upon-Tyne. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 486 and 520 in the preceding two weeks, declined to 429 last week, a lower number than in any week since the beginning of March. These 429 deaths included 177 from measles, 102 from whooping-cough, 37 from diarrhœa, 32 from "fever" (principally enteric), 27 from small-pox, 27 from diphtheria, and 26 from scarlet fever. No death from any of these diseases was recorded during the week in Norwich, in Wolverhampton, or in Halifax; while they caused the highest death-rates in Manchester, Sheffield, and Newcastle-upon-Tyne. The greatest mortality from measles occurred in Manchester, Sheffield, and Newcastle-upon-Tyne; from whooping-cough in Oldham, Birkenhead, and Plymouth; from scarlet fever in Leicester and Sunderland; and from "fever" in Brighton and Blackburn. The 27 deaths from diphtheria in the twenty-eight towns included 17 in London, 2 in Portsmouth, and 2 in Liverpool. Small-pox caused 51 deaths in London and its outer ring of suburban districts (exclusive of 16 London residents recorded in the metropolitan asylum hospitals and camp at Darenth), 2 in Hull, 1 in Manchester, and 1 in Sheffield. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 1359 and 1201 in the previous two weeks, rose again to 1221 last week; the admissions to these hospitals, which had been 282, 272, and 180 in the previous three weeks, rose again to 204 last week. The Highgate Small-pox Hospital contained 67 patients on Saturday last, 14 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 302 and 296 in the preceding two weeks, further declined to 231 last week, and were 29 below the corrected weekly average. The causes of 66, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Brighton, Portsmouth, Bradford, and in four other smaller towns. The largest proportions of uncertified deaths were registered in Wolverhampton, Nottingham, Oldham, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·5 and 21·8 per 1000 in the previous two weeks, declined again last week to 20·6, but exceeded by 2·0 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 10·0 in Perth and 17·0 in Dundee and in Aberdeen, to 23·9 in Glasgow and 24·5 in Greenock. The 502 deaths in the eight towns included 22 which were referred to whooping-cough, 13 to measles, 13 to diarrhœa, 7 to "fever" (typhus, enteric, or simple), 5 to diphtheria, 3 to scarlet fever, and not one to small-pox; in all 63 deaths resulted from these principal zymotic diseases, against 59 and 74 in the preceding two weeks. These 63 deaths were equal to an annual rate of 2·6 per 1000, which exceeded by 0·1 the mean rate from the same diseases in the twenty-eight English towns. The deaths referred to whooping-cough, which had been 27 and [illegible] in the preceding two weeks, further declined last week to 22 of which 12 occurred in Glasgow, 6 in Edinburgh, 2 in Greenock, and 2 in Leith. The 13 deaths from measles showed a decline of 2 from the number in the previous week, and included 7 in Glasgow, 3 in Greenock, and 2 in Edinburgh. The 13 deaths attributed to diarrhœa were also fewer than those in the previous week, and scarcely differed from the number in the corresponding week of last year. Of the 7 deaths referred to "fever," showing an increase upon the exceptionally small number in the previous week, 4 occurred in Leith and 3 in Glasgow. The fatal cases of scarlet fever and diphtheria were considerably below the average, and showed a decline from recent weekly numbers. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 87 and 126 in the preceding two weeks, declined again to 94 last week, and were 7 below the number returned in the corresponding week of last year. The causes of 67, or more than 13 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had declined in the preceding four weeks from 35·0 to 23·1, rose again to 29·1 in the week ending June 13th. During the first ten weeks of the current quarter the death-rate in the city averaged 30·6 per 1000, the rate during the same period not exceeding 20·1 in London and 18·5 in Edinburgh. The 197 deaths in Dublin last week showed an increase of 41 upon the number in the previous week, and included 24 which were referred to the principle zymotic diseases, against numbers steadily declining from 34 to 15 in the preceding four weeks. These 24 deaths were equal to an annual rate of 3·5 per 1000, the rate from the same diseases being equal to 2·8 in London and 1·9 in Edinburgh; they included 11 from measles, 7 from "fever" (typhus, enteric, or simple), 3 from scarlet fever, 2 from whooping-cough, 1 from diarrhœa, and not one either from small-pox or diphtheria. The fatal cases of measles, whch had been 17, 13, and 9 in the preceding three weeks, were 11 last week; and the deaths from "fever" showed an increase upon the recent weekly numbers. Seven inquest cases and 10 deaths from violence were registered, considerably exceeding the numbers in any recent week. Nearly a third of the deaths were recorded in public institutions, The deaths both of infants and of elderly persons showed a marked increase upon those returned in the previous week. The causes of 25, or nearly 13 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

Surgeon-Major F. Ferguson has arrived at Cairo, sick, from the Nile.

WAR OFFICE.—Grenadier Guards: Surgeon-Major Henry J. H. Lawrence to be placed on retired pay, with the honorary rank of Brigade Surgeon.

ARMY MEDICAL STAFF.—Surgeon-Major John Kinahan, M.D., is granted retired pay, with the honorary rank of Brigade Surgeon; Surgeon Richard Henry Stewart Sawyer, M.B., from half-pay, to be Surgeon, vice Robert Lesly, M.B., deceased. The undermentioned Surgeons on probation to be Surgeons:—Samuel Hickson, M.B.; Henry James Fletcher, M.B.; Sidney Herbert Lindeman; Edward Davis; Simpson Powell, M.B.; Frederick William Caton Jones, M.B.; James Meek, M.D.; Arthur Edward Morris, M.D.; Eugene Cormack, M.B.; Claudius O'Donel, M.D.; William Alexander Carte, M.B.; Arthur Ormsby Fitzgerald; Frederick Dundas Elderton; Edward Nodin Sheldrake; Robert Everard Molesworth; John William Francis Long; Charles Langford Josling; John Francis Bateson, M.B.; William Travers Swan, M.B.; Joseph Bulfin, M.B.; Robert Lockhart Ross Macleod, M.B.; James Henry Curtis; Gofton Gee Adams; James M. F. Shine, M.D.; William Bullen Day, M.B.; David Rogerson Hamilton, M.B.; Robert Geo. Thompson, M.D.; Charles T. Blackwell; Robert Ignatius Power; Charles Randolph Kilkelly, M.B.; William Henry Bean; Nicholas Charles Ferguson, M.B.; Samuel Richard Wills; Michael Leo Hearn; Stephen Lawson Deeble; Richard Harris Hall, M.D.; William Hallaran Bennett, M.B.; John Henry Greenaway; Richard George Hanley, M.B.; William Howard Bell; Gerald Cree; Samuel Cowell Philson; John Michael Nicolls, M.B.; Frederick William Henry Davie Harris.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of 1st April, 1881, Fleet-Surgeon Frederick Augustus Brice has been placed on the Retired List, with permission to assume the rank and title of Deputy Inspector-General of Hospitals and Fleets.

The following appointments have been made:—Surgeon Alexander Gascoigne Wildey to the *Medina;* Surgeon James M'Cardie Martin to the *Duke of Wellington;* Surgeon Alexander Gordon Andrews to the *Medway;* and George R. Moore to be Surgeon and Agent at Jersey.

ARTILLERY VOLUNTEERS.—2nd Northumberland (Percy): James Henry Davidson, Gent., M.B., to be Acting Surgeon. —2nd East Riding of Yorkshire: Thomas Bowes Shaw, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—Lieut.-Colonel Commandant Pearson Robert Cresswell, F.R.C.S., commanding the 2nd Glamorgan Rifle Volunteer Corps, is granted the honorary rank of Colonel.

THE VOLUNTEER MEDICAL STAFF CORPS.—Surgeon John H. Casson, from the 2nd Derbyshire Rifle Volunteer Corps, to be Surgeon. Surgeon William Henry Platt, from the 1st Tower Hamlets Rifle Volunteer Corps (the Tower Hamlets Rifle Volunteer Brigade), to be Surgeon. The undermentioned gentlemen to be Surgeons:—John Edward Squire, M.D.; Samuel Walter Sutton, M.D.; Edgar William Willett; William Edmund St. Michael Raw.

Correspondence.

"Audi alteram partem."

THE COLLEGE ELECTION.

To the Editor of THE LANCET.

SIR,—Although I think it would be very undesirable, as a precedent, that any candidate for election to the Council of the Royal College of Surgeons should be called upon to state precisely his views upon any question, as a test of his eligibility for an office wherein he should be able to exercise an unfettered judgment, in accordance with the confidence reposed in him and in his honesty of purpose by the electoral constituency of Fellows, yet it seems to me that the present occasion is quite exceptional with regard to that principle.

Certain matters of vital consequence to the rights of the Fellows, and the future welfare, or perhaps the existence, of the College, have been so freely and fully considered, so threshed out by discussion, that it is simply impossible for any eligible candidate for the College Council not to have arrived at a definite conclusion thereon. Accordingly, I proceed to state my convictions, and the course therefore I should be prepared to take in the event of my being honoured with a seat in the Council.

There is one positive wrong which underlies all other forms of exclusiveness, and the mal-influence of which paralyses the hands of that section of the Council who are still bound by tradition—I mean the restriction of the office of examiner in surgery almost exclusively to members of Council. Other positions of emolument have been thrown more open to the Fellows and to the Members generally; but the chief source of emolument yet remains restricted to members of the Council. The injustice and the inconsistency of this exclusiveness are obvious, seeing that many Fellows may be highly qualified for the office of examiner in surgery who are not on the Council, and that members of Council may possess the capacity for administration rather than special fitness for the office of examiner. The two positions are not convertible. Let the conjunction of these two offices be broken up, and then the Council will see no desirability in their maintaining the present *status quo.* Other things would follow. Who can doubt that the President of the College should not be elected necessarily in the order of rotation from members of the Council, that at a yearly meeting the report of the Council should be submitted to the electoral constituency, and that no vital change in the constitution and relations of the College should be undertaken by the Council without the knowledge and concurrence of the Fellows and Members constituting the College? In all these respects the College should stand upon the same basis as that of any other Society—say, the

Royal Medical and Chirurgical Society, which is quite analogous in its relations to the general constituent body.

Well, these are the conclusions at which I have long since arrived after mature consideration, and to which I should be quite prepared to give effect in the Council of the College. In private circles I have freely acknowledged my convictions; and as the present crisis seems to demand a public statement of them, may I ask you to disseminate them through the medium of THE LANCET?

I am, Sir, yours obediently,
FREDERICK JAMES GANT.

Connaught-square, June 17th, 1885.

AURAL EXOSTOSES.

To the Editor of THE LANCET.

SIR,—The first case in which Mr. Field removed an aural exostosis with a dentist's drill occurred in 1877. He says he "got the idea of the operation from Dr. Matthewson's paper." This paper was read at the first Otological Congress held in New York in the autumn of 1876, and was afterwards published. My article appeared in THE LANCET of Jan. 22nd, 1876. Mr. Field says of me: "He has not published any cases *for our guidance describing the details of the operation*." But in the article referred to I mentioned that since 1874 I had used a dentist's drill to remove aural exostoses, and maintained that they arose from a local irritation of the external meatus, dismissing as quite untenable the theory of their gouty origin. I noted that I had observed as many as fourteen cases (exclusive of hospital patients) in one year. The conditions under which they should be operated upon, and, what is of equal or more importance, when they should not, are there most definitely stated. Besides this, in my article in "Holmes' System of Surgery" the pathology of these growths is discussed; the method of operating, the difficulties met with, the conditions under which they should be removed, and when not, are all most carefully described. The same may be said of the last edition of my lectures, in which five pages are devoted to the subject. In regard to the International Medical Congress, the words I actually used (and they are reported in the Transactions) were: "Another point which also bears out the theory of a local cause to these growths is one which I have constantly observed (*and it has been recorded by others*). It is that, when enlargements are found in both canals, patients have been much addicted to sea-bathing."

I am, Sir, your obedient servant,
W. B. DALBY.

London, June 13th, 1885.

*** This controversy must now end.—ED. L.

CHLOROFORM v. ETHER.

To the Editor of THE LANCET.

SIR,—I confess to a certain feeling of disappointment that my letter on this subject, which appeared in your journal of March 7th, has not produced more expressions of opinion than it has. In THE LANCET only two have appeared, but I have had sent me from the States a reprint of an article in the *Boston Medical and Surgical Journal* of April 13th, 1882, entitled "Homicides by Chloroform," which in its condemnation of this drug goes further than Messrs. Braine and Buxton. Mr. Braine, after quoting my contention "that in the production of complete anæsthesia there is little or no difference (in danger to life) between chloroform and ether, whilst in the after-effects, especially as regards vomiting, nausea, and depression of spirits, chloroform is much superior to ether," and saying that this is exactly contrary to what he has been endeavouring for years to demonstrate, begs to point out to me that whilst ether is a cardiac stimulant, chloroform, on the other hand, is a depressant of the heart's action; that the former never kills by paralysing the heart, whilst, on the contrary, the principal cause of death in fatal chloroform cases is the sudden cessation of the heart's action.

Now, is not this too bad? I write a letter in which it is manifest that I take for granted that chloroform kills by depressing the heart's action, and show how this can be remedied, and then am addressed in the *du haut en bas* fashion of "May I point out," &c. I may say further that when I first began giving chloroform, now some twenty-four years ago, I unconsciously came to the conclusion that the heart is the organ on which it tells first, for I found myself always keeping one hand on the pulse whilst giving chloroform with the other, long before I had formulated the opinion in so many words. Next, he acknowledges that dangerous symptoms occasionally arise during the administration of ether; but when these do occur the respiratory organs are affected, and there is plenty of time for the proper application of remedies, these symptoms being rarely followed by death. Surely this is begging the whole question, to elucidate which my letter was written. Are these symptoms rarely followed by death? Let us see. Mr. Braine asks me to consult the statistics of fatal cases, in which I shall find that the proportion of deaths under the administration of chloroform is about 1 in 4500, whilst that under ether is only 1 in 20,000! Where are these statistics? I challenge them at once as false and absurd. I have seen, I believe, at least 10,000 cases of chloroform administration with only one death, and that in a woman who, as we found afterwards, had been drinking heavily for a fortnight. But I have got some statistics, compiled for the Registrar-General, who has kindly furnished me with them. I asked for a return of the deaths from the various anæsthetics for the past ten years, but was informed that they could not be given separately; however, a return of the deaths from chloroform and ether (1874-83), in which probably are included those from other anæsthetics in England and Wales, was sent.

Before giving this, let us consider how stand matters bearing on these statistics. First of all, population has increased, but not in so great a degree as to affect materially the comparatively small number of deaths from these drugs. Secondly, there are many operations done now, or done in greater number than were done formerly; but, on the other hand, there are many operations done now without anæsthesia which formerly were done nearly always with it—such as for cataract, &c. I speak of the days before the introduction of cocaine, and without any reference to it whatever. Thirdly, I believe that there is more care bestowed upon the administration of anæsthetics than formerly; and, fourthly, if what the advocates of ether say is true, there is much greater safety in this drug.

From the first three of these considerations we may fairly draw the conclusion that we ought to expect only a slight increase of deaths owing to the increase of population, the other causes balancing each other, but when we add the fourth, we ought to find a great decrease indeed. Mr. Braine says ether is 4444 times as safe as chloroform! Now what are the facts? In 1882, when ether was much used, the deaths of men from chloroform and ether were more than twice as great as in 1874, when ether was scarcely used at all. In women in 1882 there were exactly 75 per cent. more deaths than in 1874. In the second half of the decade, in both sexes, the numbers are 150, as against 101 in the first half.

Ought not these facts to make us pause before we assume that there is the much vaunted safety in ether? Is it not the fact that all anæsthetics universally used are equally fatal, for you cannot abolish all the outward manifestations of life, save those of respiration and circulation, without coming perilously near to the extinction of these. By "equally fatal," I mean this: that if one anæsthetic were used exclusively for all cases through a certain period of time, and another anæsthetic were used exclusively for all cases through another like period of time, the rate of mortality would be the same in each.

I am told by a friend on whom I can rely implicitly that in a ten years' connexion with a large hospital there have been two deaths from anæsthetics, of which one was from chloroform and one from ether. I believe that during the past year, in the United Kingdom the deaths from chloroform and ether have been about equal.

So far I have confined myself to Mr. Braine's letter, inasmuch as the "safety" point is the principal one. As to the other letter, as Mr. Buxton agrees with Mr. Braine, I *need not enter further into this point, nor need I dilate much* on the sequelæ point, as Mr. Buxton agrees with me in considering that the after-effects of ether are far worse than those of chloroform. I think few doubt this. When the ether wave came from the West I made an experiment on myself, and in consequence obtained an accurate idea of what I should think must be the prodromata of suicide. Later, when I tried the drug on patients, I found that whilst the symptoms preliminary to complete anæsthesia were no less terrifying than those of chloroform, the symptoms succeeding were far worse and more prolonged. One old gentleman on whom I operated for cataract had a profound melancholy for several months, which he attributed to ether; and I was repeatedly asked by the matron of St. Paul's Eye and Ear Hospital not to give ether, as the patients were so much more sick and ill, and longer in recovery.

Since writing the above I have received from the Registrar-General a return of the deaths from chloroform and ether—practically of chloroform alone—for the ten years 1864–1873. The numbers are: males 106, females 24, total 130. The lowest year was 1866, with 4 males to 1 female; the highest year was 1872, with 19 males to 4 females.

The following is the copy of the Report furnished me by the Registrar-General.

"England and Wales.

'*Deaths from Chloroform and from Ether registered in England and Wales in each of the years 1874 to 1883.*

Year.	Males.	Females.	Persons.
1874	*13*	*6*	19
1875	16	5	21
1876	*20*	*6*	26
1877	12	7	19
1878	*13*	*6*	19
1879	14	9	23
1880	*17*	*9*	26
1881	24	7	31
1882	*27*	*10*	37
1883	24	9	33
Total in the 10 years	180	74	254"

I am, Sir, your obedient servant,

Liverpool, May 5th, 1885. Geo. E. Walker, F.R.C.S.

A DANGER FROM DRAIN VENTILATION.

To the Editor of The Lancet.

Sir,—Not long ago, when attending a young lady with ulcerated throat, I heard of a family several members of which were for a long time ill with troublesome ulceration of the throat, the cause of which was for a time a mystery. It was at last found out that the ventilating pipes in connexion with the drains of an adjoining building were not carried up above the roof, the result of this arrangement being that sewer gas found its way into the dwelling of the patients by the upper windows. Now, when so much is being done in the way of drain ventilation, it becomes obviously a most important matter for the ventilating shafts to be carried well above all windows that may be in proximity. In the heavy air of a town it is especially important to let the gas escape at an altitude where there is some air current to blow it away.

I am, Sir, yours obediently,

Welbeck-street, W., June, 1885. John C. Thorowgood.

COCAINISATION OF THE BLADDER.

To the Editor of The Lancet.

Sir,—I see that you refer in your issue of May 30th to an interesting case of litholapaxy, rendered painless by the injection of cocaine into the bladder, the operation being performed by Professor Bruns. Permit me to point out that the complete anæsthesia induced in this case is not obtainable in all. From the startling success of the first cocaine litholapaxy, performed at St. Peter's Hospital for Stone soon after the introduction of the drug, it was expected that cocaine would partially supersede the ordinary anæsthetic in operations upon the vesico-urethral tract. Subsequent experience, however, has clearly shown that it cannot always be relied upon to produce anæsthesia. I would quote two cases illustrating the extremes.

A. S——, aged nineteen, had suffered from difficulty in micturition for twelve years. Passed blood at onset of symptoms; none since. Had been treated for the last three years for gleet. Applied at the out-patient department at St. Peter's in January; stone detected. Eight grammes of a 4 per cent. solution of cocaine were injected into the bladder, and the stone crushed and evacuated without pain. The stone weighed fifteen grains.

D. G——, aged forty-five, had suffered for two years from stone, classical symptoms being present. Sixteen grammes of a 7 per cent. solution were injected. On attempting to crush the stone much pain was experienced, and the operation had to be completed under ether. The stone weighed eighty-five grains.

Upon what does this resistance to the action of the drug depend? Deficient knowledge of its properties, probable sources of error in its application, great chances of adulteration, and all combine to prevent a correct answer being given. A careful consideration of unequivocal cases of cocaine resistance will prove of great value, for I do not doubt that a thorough microscopical examination of the pathological condition of such will afford a clue to some of the many, and at present inexplicable, neuroses of mucous membranes.

I am, Sir, yours truly,

E. Hurry Fenwick, F.R.C.S.

George-street, Hanover-square, W., June, 1885.

LUNACY AMENDMENT ACT.

To the Editor of The Lancet.

Sir,—The workhouse medical officers appear to me not to have awakened to the serious manner in which their interests are threatened by the above Bill. In the first place, they will, in country places, be subjected to great *inconvenience by the disqualification of officiating clergymen*, as a magistrate is not to be found always within a reasonable distance, and, when found, his superior *intelligence* is not always to be reckoned upon. It appears to me that this clause is instigated by the judicial mind, which is unable to free itself from the old-fashioned idea that lunacy is in some sort a crime, and should be dealt with by a justice.

By the amendments of May 13th it is provided that "an alleged lunatic *may* be *received into a* workhouse and detained for not more than forty-eight hours." This ought to be three *days, for obvious reasons*: very many cases cannot be decided upon at one interview; often friends should be *communicated* with, *facts ascertained* and verified; and when a Sunday intervenes the relieving officer and magistrate cannot be communicated with and distances traversed all within the short period of forty-eight hours.

Clause 10, subsections 4 and 5, provides that "no person shall be detained in a workhouse for more *than fourteen* days without *an order* under the hand of a justice; and this order must be made on the *application* of a relieving officer *supported* by a medical certificate in Form 6 under the hand of a duly qualified medical practitioner, *not being an officer of the workhouse*, and by a certificate under the hand of the medical *officer of* the workhouse in the Form of the schedule." This is followed by a penal clause imposing a fine *not* exceeding £10 on the medical officer for every day, or part of a day, during which he omits to perform the preceding duties.

Now, as some medical officers have entertained doubts as to the purport of the above—and I have read the Act through with a solicitor, a barrister, and a stipendiary magistrate,—I give its meaning and effect. A medical officer will not have the power to detain any lunatic in the workhouse without sending the case before a magistrate and another medical man with a certificate from himself. This being imposed upon him as part of his duty as workhouse medical officer, he will not be able to claim any *payment* for it; this is confirmed by a clause in the amendments of May 13th which runs thus: "The *guardians of the union* to which the workhouse belongs shall pay such *reasonable remuneration* as they think fit to *the medical practitioner* who, not being an officer of the workhouse, examines a *person* under this section." *Thus, it is* beyond all doubt that the workhouse medical officer, having had the trouble *and* care of the case, *is defrauded of* a fee and placed in a subordinate insulting position. It will also be harsh and injurious *to the unfortunate* lunatic, as the medical officer will not be able, as he is now, to grant permission to the friends *to take the patient* out for a few days' holiday, and readmit the case without further trouble; but after it is *decided upon by the magistrate* and the outside doctor, he or she will be virtually a perpetual prisoner in the workhouse.

Every one of the 17,330 cases now in the workhouses must, within fourteen days of the passing of the Act, be proceeded with under Clause 10; that is, the unfortunate medical officer must fill up a form of notice to the relieving officer and a certificate according to Form C in each case, and without any payment.

I am, Sir, yours faithfully,

June, 1885. THOMAS J. VALLANCE, M.D., F.R.C.S.Exam.

THE TITLE OF "DOCTOR" FOR LONDON MEDICAL STUDENTS.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct one or two impressions which my letter of the 30th ult. seems to have conveyed to Mr. Rayne? In his letter of the 6th inst., Mr. Rayne takes exception to the terms "*considerable extra expense*" which I said was incurred by those who, like myself, had taken a university degree *in addition to the membership of the Royal College of Surgeons*, and he further informs me that this "extra cost exists only" in my "imagination." How this can be the case I cannot understand, as surely, when a man first goes through the full four years' curriculum at one of "the great London schools" (in my case at Guy's), *takes the M.R.C.S., and the L.R.C.P. or L.S.A.* in London, and then, in addition to this, spends two more years in Aberdeen, having to pay for board and lodging, additional courses of lectures, dissections, practical courses, and for examination fees, this naturally entails considerable extra expense.

With regard to the "easy curriculum" which leads to Scotch graduation I do not think that those conversant with these examinations will agree with this statement; the experience of myself and of most of those from London schools who were in Aberdeen during my time proved the contrary. I only refer to those who like myself had already passed the College of Surgeons in London and some who, in addition, had also the L.R.C.P. Lond. or L.S.A.

Mr. Rayne refers to "*men like Mr. Wright and his compeers who have experienced so comparatively easy a curriculum.*" Not having the honour of knowing him, I am unable to form so ready a judgment as to the curriculum of "men like Mr. Rayne and his compeers," though I believe the curriculum of one London hospital is much the same as that of another.

I fully agree with Mr. Rayne that something should be done to protect the London students from being in any way overshadowed by the licentiates of the Scotch corporations; I pointed this out in my first letter, and I suppose no one doubts that "the student at the great London schools has unrivalled opportunities for clinical and surgical work;" but from personal experience of the "teaching" both in Aberdeen and London, the former certainly holds its own, and this is the opinion of many more able to judge than I was, and certainly more fit to do so than Mr. Rayne, who has not experienced it.—I am, Sir, yours faithfully,

C. ST. JOHN WRIGHT, M.B. Aberd., &c.

St. Mary's Infirmary, Islington, June, 1885.

LIVERPOOL.

(*From our own Correspondent.*)

CITY IMPROVEMENTS.

It has been proposed to spend £100,000 in city improvements, and in furtherance of this an inquiry was held on the 16th inst. at the Town Hall before Major Phipps Carey, [illegible] inspector appointed by the Local Government Board to receive evidence. The Town Clerk, in opening the case, quoted the resolution passed by the City Council on April 15th last, which was as follows:—"That [illegible] £100,000 be borrowed under the provisional order [illegible] 1884, confirmed by the Local Government Board's [illegible] Orders Confirmation Act, 1884; and that application [illegible] the requisite sanction of the Local Government Board." Dr. Stopford Taylor, the medical officer of health, [illegible] his evidence said that under the original [illegible] presentments were made dealing with 620 houses, 615 [illegible] and 20 partly demolished. Under [illegible] Act of 1882, 532 houses were reported. In 1884, [illegible] demolished; and in 1884 he reported 336 houses, which the Council referred to the Insanitary Property Committee to be dealt with; 391 houses, which were referred to the clerk of the peace, and were brought to the notice of the grand jury, made the seventh presentment; and 734 houses which were similarly referred became the eighth presentment. The number of houses that he estimated required to be still dealt with was near upon 10,000, which, taking the low figure of five inmates to each house, would make a displacement of something like 50,000 people. This must, in order to meet the requirements of business and the comforts of the people themselves, be spread over a lengthened period. After hearing all the evidence, the inspector promised to report to the Local Government Board.

NEW MEDICAL MAGISTRATES.

Mr. Charles White and Dr. John Hankinson Gornall, both of Warrington, have been placed on the commission of the peace for that borough. Dr. Gornall is medical officer of health for Warrington, and was a distinguished student of the Liverpool School of Medicine more than twenty years ago.

THE HEAT AND SUNSTROKE.

From being comparatively cold it became intensely hot last week, the increase of temperature being remarkably sudden. On Saturday, a man while loading a cart was seized with what was believed to be sunstroke, and removed in the ambulance to the Northern Hospital, where he was pronounced by Dr. Fisher, one of the resident staff, to be in a very critical condition.

MORE "CANNIBALISM."

In spite of severe sentences, the disgusting offence of biting still continues to be frequently practised here. In two recent cases the victims were city constables, and in each case the assailant was awarded three months' imprisonment with hard labour. In a recent case, the prisoner, a young woman, was committed to the sessions for trial for biting severely another woman, whom she also dragged to the ground and beat.

MEDICAL PRACTITIONERS AND LIFE INSURANCE.

From time to time most heartrending cases occur of the widows and orphans of deceased medical practitioners being left very slenderly if not totally unprovided for, rendering necessary appeals to the generosity of their medical brethren. In most of these cases there has not been any life assurance effected, or the policy has been allowed to lapse. With every disposition to be generous, it is felt by many practitioners, especially the younger ones, that these appeals come hardly upon those who are striving by prudence and thrift to avoid falling into similar errors. The proverbial uncertainty of any individual life applies particularly to busy medical practitioners, and a more general adoption of assurance, against accident as well as death, would go far towards making a provision to many an otherwise destitute widow and orphan.

Liverpool, June 17th.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

CHOLERA PRECAUTIONS IN THE NORTH.

THE prevalence of cholera in Spain has caused no little anxiety to our authorities, for the Tyne is in direct communication in the way of commerce with Spanish ports. It is satisfactory to know that the Local Government inspector the other day expressed himself as being well satisfied with the steps that have been taken by our sanitary authorities to deal promptly with any case occurring in Tyne-bound vessels. At the meeting of the Tyne Sanitary Authority last week, however, our medical officer of health, Mr. H. E. Armstrong, stated that a rather singular procedure was sanctioned by the authorities at a neighbouring port, Seaham Harbour, which is also in constant communication with Spain [illegible] directions were given that any vessel approaching the harbour with infection was not allowed to enter, but was to be warned off. Our medical officer of health very properly stated that this was a singular and very objectionable way of meeting infection, and it was in fact unfair to shift danger, as it were, from your own to your neighbour's door. It appears, however, that the port in question is private property, and as such has rights not possessed by an open harbour; yet surely, in a case of this nature, if property has its rights, it also has its duties.

DR. DAVID DRUMMOND.

Dr. David Drummond, one of our lecturers, and a physician to the infirmary, who had, to the great regret of his many professional friends, the misfortune to be laid aside from work for several weeks, suffering rather severely from some accidental septic absorption, has now, I am happy to say, quite recovered, and has in consequence resumed his hospital and general duties. Some other cases, although not so severe, have been noticed here of late, giving rise to the view that there must be at times some peculiar tendency to this affection, so full of peril to practitioners, and which so often occurs at what may be termed the "fag end" of the session.

POISONING BY NITRATE OF LEAD AT SUNDERLAND.

An inquest was held last week at Sunderland upon a German captain, who died rather suddenly at sea off Sunderland. It appeared from the evidence that the deceased, not feeling well, had taken some medicine supposed to be Epsom salts, which immediately gave rise to vomiting and purging, with collapse, ending in death. On analysis, it was found that the unfortunate captain had taken in mistake nitrate of lead, and a verdict was returned in accordance with the circumstance.

THE SURGEON TO DURHAM GAOL.

At the conclusion of an inquest held on a late prisoner last week in Durham Gaol, the coroner took the opportunity of paying a graceful tribute to Dr. Boyd, the prison surgeon, who is now retiring. The coroner stated it was the last occasion on which they would have Dr. Boyd's services, and he referred to the great assistance he always had from that gentleman. "He had now been prison surgeon for sixteen years, and never at any time had they the slightest difficulty or doubt with respect to the evidence that the Doctor had given with regard to the nature or treatment of the cases coming before them in that prison, and he hoped the Doctor would retain that good health in the future which he had enjoyed in the past." Dr. Boyd feelingly replied in a few well-chosen words to the compliments of the coroner.

MEASLES AT JARROW.

The subject of payment to practitioners at Jarrow for certifying measles came up for consideration by the Jarrow authorities last week. This town, as I have told you, has suffered very severely from measles, and in consequence the profession was asked to certify cases to the medical officer of health. The disease lately abating, exception was taken to the cost of certificates, which were stated to be useless; but, on the other hand, the medical officer of health (Dr. A. C. Munro), while admitting the great difficulty of isolation in workmen's houses, pointed out that in every case certified disinfectants had been used, and with marked results, the disease now subsiding, no doubt to some extent owing to these precautions.

UNIVERSITY OF DURHAM.

The Easter term examinations for degrees in connexion with the Newcastle College of Medicine affiliated to the University of Durham commenced yesterday in the Assembly Rooms, Newcastle-on-Tyne, the existing Medical College being inadequate for the purpose. Upwards of fifty candidates came forward, the largest number ever presented for the final degree in the history of the College.

Newcastle-on-Tyne, June 17th.

EDINBURGH.

(*From our own Correspondent.*)

THE LATE PROFESSOR FLEEMING JENKIN, LL.D., F.R.S.

LITERARY and scientific circles in Edinburgh have sustained a heavy loss in the sudden death of Professor Fleeming Jenkin. He had been in delicate health for some months, but was much restored by a holiday in the south of England, where he left Mrs. Jenkin when he came to Edinburgh a few days ago to undergo an operation for the radical cure of varix. All went well after the operation till towards the end of the second day, when symptoms of septic absorption made their appearance. Still his condition was not considered dangerous; and it was not till the early morning of the third day that any serious mischance was apprehended. On that morning, however, a rapid aggravation of the symptoms occurred, and at noon he succumbed to the virulence of the septicæmic attack. On Monday night the remains were removed by rail to Stowting Court in Kent, the family seat, where the funeral arrangements were subsequently carried out. His death has caused universal regret in Edinburgh, where he was highly esteemed in his public capacities, and much loved in the large social circle in which he moved. Professor Jenkin was a man of true genius, and scarcely any branch of science, natural or mechanical, has failed to profit largely by the results of his labours. In sanitary science this was pre-eminently the case; for here, in addition to the large number of technical modifications and improvements which are associated with his name, his energy is illustrated by the strenuous way in which he urged the claims of sanitation upon communities at large; and it was as an outcome of two lectures on this subject, afterwards published under the title of "Healthy Houses," that the Edinburgh Sanitary Protection Association was formed; an institution which has proved a great boon to this city, and to several others where its working principle has been reproduced.

UNIVERSITY FINAL MEDICAL EXAMINATION.

The final examination for the degrees of M.B. and C.M. will take place on Monday and Tuesday, June 22nd and 23rd. The candidates' names on the list amount to over 240, a larger number than have appeared for examination here in any recent year.

ROYAL EDINBURGH ASYLUM.

The annual report of the Edinburgh Asylum has just been published, and is well worthy of perusal. In the portion contributed by the Physician-Superintendent, Dr. Clouston records the results of the year's work, illustrating them by notes of cases of special interest. His report contains also several valuable suggestions for improvement, amongst others advocating that incurable pauper lunatics who are easily managed should be kept in the hospital wards of the poorhouses with suitable nursing, instead of overcrowding the wards of the asylums as at present is the case, and masking their true character of hospitals for the cure of the curable insane.

Edinburgh, June 16th.

IRELAND.

(*From our own Correspondent.*)

THE Council of the Royal College of Surgeons will this week elect a second examiner in the departments of physics, chemistry, and medical jurisprudence.

CORK SOUTH INFIRMARY.

In a recent number (p. 1015) I drew attention to the dispute which existed between the trustees and the profession generally in Cork as regarded the election of the medical staff for a period of only five years, when a re-election became necessary. On the 12th inst. a meeting of the trustees took place, to elect for a period of five years, as required by Rule 1, several members of the medical staff. One of the trustees spoke in high terms of the services performed by the medical officers, and proposed the following resolution, which was carried unanimously:—"This meeting of the trustees of the Cork South Charitable Infirmary and County Hospital desire to express their regret that the medical and surgical staff of this hospital, as also a large number of the medical profession in the city of Cork, should have taken offence where none was intended at the advertisement issued by the trustees in order to carry into effect Rule 1." Drs. Curtis, E. R. Townsend, C. K. D. Tanner, and H. R. Townsend were then re-elected to their respective appointments without opposition.

ROYAL MEDICAL BENEVOLENT FUND SOCIETY OF IRELAND.

In the forty-third annual report of this Society the committee express their regret that the number of subscribers to the fund remains so limited that the grants in most instances are far below the requirements of the cases. During the past year £1272 was distributed, leaving a balance of upwards of £200 to meet the working expenses. Of the amount distributed £215 was to medical men, £973 to widows, and £34 to orphans. It is satisfactory to learn that an increase has taken place in the amount collected from the students in some of the hospitals and schools, and the committee trust that the other institutions may be encouraged to do something to bring students more into sympathy with the Society than heretofore. Dr. Cruise, in moving the adoption of the report at the recent annual meeting, referred to the apathy of a large number of the profession with regard to assisting the Society. As he very properly pointed out, it was the poorer members of the profession who would require the assistance of the Society, and they therefore ought to subscribe, no matter how small the sum. I may add that the poorer members will *not* subscribe, and their indifference to their own interests is followed by a considerable section of practitioners who decline to help those who refuse to help themselves.

A GRIEVANCE.

A matter of importance to dispensary medical officers was recently drawn attention to by the Council of the Irish Medical Association at their annual meeting. It appears that until recently medical practitioners when called to attend persons in custody of the police applied to the Under Secretary at Dublin Castle for their fees, which were promptly paid. Lately, however, the Lords of the Treasury decided that to avoid these fees the police officers should procure tickets, when necessary, so as to obtain the services of the dispensary medical officers. In several instances, owing to the urgent nature of the cases and the difficulty or delay in procuring tickets, the police called in dispensary medical officers, who claimed the fees as heretofore, but were refused them on the ground that "in urgent cases the dispensary medical officer was bound to give his services gratuitously pending the procurement of a ticket." The attention of the Treasury Remembrancer for Ireland was directed to the regulations of the Local Government Board, which define the duties of dispensary medical officers, in the hope that the fees claimed would be paid, but that official upheld the course recently adopted, so that the matter will have to be decided in a court of law.

Dublin, June 15th.

PARIS.

(*From our Paris Correspondent.*)

CONVICTION OF PEL FOR POISONING BY ARSENIC.

THE clockmaker, Pel, whose case I reported in THE LANCET of Jan. 31st, and again in that of April 11th, appeared before the Court of Assizes of the Seine on Thursday, Friday, and Saturday last, on two specific charges brought against him—viz., for having, in the first instance, poisoned his first wife, Eugénie Buffereau, in 1880; and secondly, making away with his servant, Eliza Bœhmer, with whom he was on intimate relations. The trial was most perplexing, owing to the mysterious demeanour of the accused, for throughout it he never betrayed the slightest emotion, nor could the Court obtain any notice from him as to his guilt either by word or deed, for he could hardly have been more impassive if he were witnessing the trial of another person for whom he had no concern whatever. After having weighed the evidence on both sides, the jury returned a verdict of guilty of the second charge only—viz., the poisoning of Eliza Bœhmer—and the accused man was condemned to death. It is not for me to plead the cause of this unfortunate culprit, but I cannot refrain from remarking that the man evidently acted under some morbid (psychopathic) influence, and that he appeared irresponsible for the series of murders he is believed to have committed, for he was always an eccentric character, and it was stated in the preliminary act of accusation that in 1877 his conduct was such as to necessitate his being removed to the Ste. Anne Lunatic Asylum, where he remained five weeks, and yet, strange to say, no allusion whatever was made to this circumstance in the defence.

PROFESSOR GERMAIN SÉE ON ASTHMA.

According to Professor Germain Sée, the only curative means against nervo-pulmonary asthma is "iodo-therapy"—that is, ioduration of the lungs and of the nervous respiratory system. But this method is not always tolerated, and patients are often induced to resort to the empirical remedies in vogue, all based on the combustion of certain substances and the inhalation of vapours thus produced. These vapours always contain a special substance to which the name of "pyridine" has been given. This substance is met with in all the products of the dry distillation of organic matters, of coal tar, of the principal alkaloids, in the fumes of tobacco, in nicotine, and in the animal oil of Dippel, from which it is ordinarily extracted. It is a colourless liquid, very volatile, of a strong penetrating odour, miscible with water in all proportions, forming, with mineral acids, soluble bases, but unstable. Professor Sée endeavoured to determine, experimentally, the physiological effects on patients suffering from asthma and from disease of the heart. The following are the conclusions of his work on the subject, which he lately presented to the Academy of Sciences:—1. Whatever the form or origin of asthma, ioduration constitutes the veritable curative method. When iodism intervenes, pyridine should be resorted to, but only during the fits. It is the best palliative, whereas iodine is the most efficacious remedy. 2. Pyridine is superior to the injection of morphine; its action is more durable and much more inoffensive. 3. In simple nervo-pulmonary asthma the fits cease completely. When the asthma is complicated with permanent pulmonary lesions, the duration of the treatment should be continued beyond eight or ten days to ensure relief. In cardiac asthma, with or without renal and dropsical complications, pyridine would render the greatest service in combating the most persistent and painful of the phenomena which accompany heart disease. The best mode of administering pyridine consists in pouring four or five grammes on to a plate, which is placed in a closed room, containing about twenty-five cubic metres of air. The patient, placed in a corner of the room, breathes the air impregnated with the vapours of pyridine. This treatment should be repeated for about twenty minutes three times a day. The absorption is immediate, and the pyridine can at once be detected in the urine.

Dr. Gibier has been charged by the Minister of Commerce to proceed to Spain to study the cholera, and the method of "cholerisation" practised by Dr. Ferrán of Valencia.

Paris, June 16th.

THE CHOLERA IN VALENCIA.

(*From our Special Correspondent.*)

THE great question at the present moment agitating all Valencia, if not a great part of Spain, is that of Dr. Ferrán and his experiments in inoculation for cholera—the disease which has now fairly got hold of this fair province. In the train, in the streets, the stranger is struck by the frequent mention of the words "cholera" and "Ferrán." Dr. Ferrán is a native of Tortosa; he is about thirty-six years of age, and received his medical education at Barcelona, where he obtained a special prize for his essay on Microbiology, and numerous other prizes connected with professional subjects. During the great cholera outbreak last year in Marseilles, he was sent as special commissioner from Barcelona to study the disease, which was then raging. There he spent three months at the Faro Hospital, enjoying the advantage of frequent communication with the celebrated Dr. Koch. On his return to Valencia he devoted much thought and study to the subject, and on the appearance of cholera in this province in March, he commenced a series of inoculations, first at Tatira, and next at Alcira, where he soon began to exercise a powerful influence. His system may be briefly described as follows: Regarding himself as following in the legitimate train of Koch and Van Ermengem, he considers the comma bacillus of Koch as only one stage of the micro-organism; he (Ferrán) declares that it passes through several, and, utilising his micro-organism as finally developed by him, he injects it (suspended in a medium, such as chicken broth or beef-tea) into the human being, and so ensures the individual against an attack of cholera, or, at all events, if attacked at all, a very mild one will ensue. On arriving at this town some days back, I at once proceeded to see Dr. Ferrán, and found him at home, with two assistants, busily engaged in inoculating various people. There were quite fifty done whilst I was there, of all ages and sexes. The operation is a very simple one. About half a cubic centimetre of the fluid containing the micro-organisms is placed in a small hypodermic syringe and injected into the back of the arm about four inches above the elbow. It is usually done in both arms. Many of those present would only be done by Dr. Ferrán himself, having a kind of superstitious faith in him only. I was told that in about six hours the constitutional symptoms set in, and lasted from four to as many as forty-eight hours, the violence of the symptoms varying in different individuals. I called the same evening at the house of a newspaper editor, who, with three of his family, I had seen inoculated in the afternoon, and found only one of them complaining of any unusual symptoms; but his brother, who lived close by, was taken so seriously ill as to be alarmed, and sent for his medical adviser; however, he eventually regained his normal state of health. On asking Dr. Ferrán if in all his inoculations, now some thousands, he had seen or heard of anyone having suffered ill effects, either constitutionally or locally, he declared most emphatically, "No." He subsequently showed me over his laboratory, his preparations and cultivations in their various stages under the microscope, and about 100 bottles containing his redoubtable micro-organisms. He favourably impresses one in conversation when explaining his views and ideas. He is a quiet, gentlemanly, and I should say very self-reliant man, and gave me the idea of one who is much worried, and to whom a period of rest would be an intense boon. He showed me letters he had received from many distinguished men in Europe encouraging him in his work, and seemed particularly anxious that the English Government would institute an extended inquiry into the whole matter.

The Royal Commission of Spain is at present here and in the neighbourhood investigating Dr. Ferrán's method and the epidemic on behalf of the Government. The president is Dr. Alonso Rubio, of the Royal Household; the other members are Dr. Mendoza, a chemical professor in Madrid University, and Professors Maestre San Juan and Dios Benitez, with Señor Castellote as secretary. Events in Spain move slowly, and the Commission moves slowly, and when its report will see the light it is hopeless to speculate, and whether it will be of any value when it does see the light is a very moot question, as things in Spain, and more particularly this epidemic of cholera, are so mixed up with private interests and political movements that it will lose much of its value from a scientific point of view. Ferrán's disciples have already secured a strong partisan in the eloquent Castelar, whose republican proclivities are so well known, and whose support may injure their cause more than anything else. There is also a Portuguese Commission here of three members from Lisbon, Coimbra, and Oporto respectively, highly intelligent and scientific gentlemen, and from them I expect much useful and trustworthy information on the subject, as they are well qualified to deal with it and will be totally free from all local and political prejudices. So far they are very reticent, and beyond the usual Continental shrug nothing is to be got out of them. There is also a delegate from Brazil, and a representative from the Parisian paper *Le Temps*, besides hosts of local celebrities.

With regard to the cholera itself, so far as a painful Indian experience will allow me to judge, it is undoubtedly Asiatic, and of a virulent type. Last evening I went out to the cholera hospital, and saw many cases with the medical man in charge. There were about twelve women and seven men; the former seemed much the worse cases, three of them were then *in extremis*, and one, a young girl, had only been brought in at eleven o'clock in the morning. They seemed well cared for; the good sisters glided quietly about and anticipated every wish of the poor sufferers. There was an abundance of medicines and disinfectants. The doctor appeared to be well up to his work, showed no nervousness, and, a very unusual thing in Spain, was a good linguist, speaking both French and English. The building is situated about two miles from the town of Valencia, in a poor quarter. When first established the officials had to run the gauntlet of storming, and some were seriously injured—so annoyed were the people at having a pest-house established in their midst. But now they are becoming more reconciled. With regard to Dr. Ferrán's statistics, which have already been published in several English newspapers, they read well; but I may as well state, on the authority of several Englishmen long resident in Spain, that statistics in this country are utterly worthless, and can be made and twisted so as to suit any purpose. With reference to the actual value of Dr. Ferrán's inoculation, its one established value up to the present is that amongst the credulous and ignorant it has done much to allay panic. In Alcira especially the populace have in him the most absolute faith; but with an enthusiastic and fickle race like the Valencians, the man who is their idol to-day might be stoned to-morrow. It is right also to state that, on the authority of Dr. Jelly—an English physician whose word is unimpeachable—some very sad effects in the shape of phlegmonous ulcers and blood-poisoning have resulted to several of those who have been inoculated. Into the scientific aspects of the question I have not entered. Should any good result to medical science (which I very much doubt), it will take a long time, much research, and a careful table of statistics, which I fear are not to be obtained in Spain, before anything worth placing before the English public can be obtained, and I will close this letter by stating that I have endeavoured to give a plain and simple and unbiased narrative of what I actually saw, or heard from authorities who can be thoroughly depended on.

Obituary.

JOHN THORBURN, M.D., F.R.C.P.

Dr. Thorburn died at his residence, Moss House, Rusholme, Manchester, on May 26th, after an illness of ten days. He was attended by Dr. Dreschfeld and other friends with unremitting care, though the nature of his illness, pulmonary embolism, gave almost no hope of recovery. Dr. Thorburn was born at Huddersfield in 1834, his parents afterwards removing to Manchester. Educated at the Edinburgh High School, he entered the Edinburgh University in 1849, and graduated there as Doctor of Medicine in 1855. His graduation thesis on Surgical Fever was awarded the mark of distinguished merit. At an early stage of his career as a student he was elected President of the Royal Medical Society. After taking his degree he held the posts of house-surgeon and house-physician in the Edinburgh Royal Infirmary, and house-surgeon to the Royal Maternity Hospital. Among his friends and colleagues were Sir Joseph Lister and Dr. Wilson Fox, and he had the good fortune to number among his teachers Alison, Christison, Syme, Goodsir, Hughes Bennett, and Sir James Simpson.

After leaving Edinburgh he was for some time resident assistant in the Brompton Hospital for Diseases of the Chest. Thus, thoroughly equipped, he settled in Manchester in 1858. His first public appointment was that of medical officer to the Chorlton Dispensary. In 1860 he was elected to the staff of the Clinical Hospital. Dr. Thorburn's energy and ability were soon manifested in the active part which he took, along with Dr. Henry Simpson and others, in the founding of the Southern Hospital for Diseases of Women and Children in 1866. Here he obtained opportunities for work in that department of medical science to which he thenceforward more especially devoted his attention; while the charity has owed no small share of its success to his ability and tact. In 1873 he was appointed obstetric physician to the Royal Infirmary, being the first to hold that appointment. In the same year he commenced his duties as Lecturer on Midwifery in the Royal Medical School. The amalgamation of the Royal School of Medicine with Owens College, and the subsequent constitution of the Victoria University, were attended almost as a matter of course with the appointment of Dr. Thorburn to the chair of obstetric medicine. His teaching was distinguished by the characteristics pervading all his work, clearness combined with moderation and justness of judgment.

In 1878 he took the diploma of Member of the College of Physicians of London, and in the beginning of May of this year was elected a Fellow. Throughout his long and successful career, Dr. Thorburn found time to show his interest in all progressive medical movements, and in matters affecting the physical well being of the community. He acted as secretary for three years of the Medical Society, and was subsequently elected president. He was also president of the Medico-Ethical Association. Of the Manchester Edinburgh University Society he has been annually elected president since its foundation. His interest in the public welfare is shown in his pamphlets on "The Mode of Admission to our Medical Charities," and in his little work "On Vaccination" for general readers. Amongst other short papers written by him we may mention "The Power and Place of Art in the Treatment of Disease," pregnant as it is with valuable advice to the young practitioner, "Suggestions as to the Medicinal Treatment of the Unborn Child," and his thoughtful essay on "Female Education in its Physiological Aspect." Dr. Thorburn took an active share in the foundation of the *Medical Chronicle*, and the measure of success which it has attained is in no small degree due to his efforts. For the last two years Dr. Thorburn was engaged in the preparation of a "Practical Treatise on the Diseases of Women."

To the additional strain thus imposed on one fully occupied in other pursuits, there is but little doubt that we must attribute his untimely death at the early age of fifty-one, just when he was beginning to reap the full reward of an honoured and honourable career. To all who knew his genial and kindly disposition and the straightforward manliness of his character, his death has brought a sense of personal loss. Dr. Thorburn leaves a wife and five children, of whom one, Dr. William Thorburn, is a member of the profession which his father adorned.

Medical News.

COLLEGE OF PHYSICIANS, IRELAND.—The diploma of Physician and Licentiate in Medicine was conferred on the 12th inst. upon the following gentlemen:—

*W. E. Dawson, L.S.A.L.; *C. J. Faulkner, L.R.C.S.; J. H. Foley, L.R.C.S.; G. B. Flanagan, L.R.C.S.; F. S. Gramshaw, L.R.C.S. Ed.; E. Lambkin, L.R.C.S.; B. Lane, L.R.C.S.; *A. J. Luther, L.R.C.S.; J. H. Maguire, L.R.C.S.; J. J. Norton, L.R.C.S.; D. M. O'Callaghan, L.R.C.S.; M. P. O'Donovan, L.R.C.S.; C. J. Penot, L.R.C.S.; *R. C. Thacker, L.R.C.S.

* Received in addition the Diploma in Midwifery and Diseases of Women.

SOCIETY OF APOTHECARIES.—The following gentlemen passed his examination in the Science and Practice of Medicine, and received certificates to practise, on the 11th inst.:—

Cook, Alexander, L.F.P.S. Glasg., Argyle-place, Edinburgh.
Stricker, Frederick W., M.B. Camb., M.R.C.S., St. Saviour's, Jersey.

Mr. William Henry Bowes, of Guy's Hospital, M.R.C.S., has been elected to the Surgical Scholarship of the Society of Apothecaries, of the annual value of £100. The examiners, Sir William Mac Cormac and Mr. Bryant, report that Mr. William Alexander Bowes McCabe, of University College, M.R.C.S., obtained a number of marks nearly equal to those of the successful candidate.

AFTER-CARE OF MENTAL CONVALESCENTS. — The anniversary meeting in connexion with this praiseworthy movement will, with the permission of Dr. Savage, medical superintendent, be held at Bethlem Hospital, on Thursday, July 2nd next.

AT the seventh annual meeting of the Home Hospitals Association for Paying Patients, held on the 10th inst., it was stated that through the greater part of last year there had generally been at least three applicants for each available bed.

AT the Aylesbury County Court on the 10th inst., Dr. Frederick Keene recovered £20 for professional services from a patient who wished that the principle of "no cure no pay" should apply to the medical profession as it did to his own trade—viz., that of an ironmonger.

ST. THOMAS'S HOSPITAL.—The annual presentation of prizes to the students of St. Thomas's Hospital took place on Monday, June 15th, in the Governors' Hall. The Lord Mayor, who presided, alluded to the ancient ties between the Corporation of the City of London and the hospital. He expressed himself as much gratified at the satisfactory reports given by the dean, Dr. Ord. The examinations showed that a remarkably large proportion of the students had attained a high degree of proficiency in their several subjects. Subsequently, a meeting of the old students of St. Thomas's Hospital was held in the library of the medical school, in order to present a testimonial to Mr. Charles Stewart. Dr. Ord, who spoke with much feeling, expressed for himself and for the school the deep affection in which Mr. Stewart was held. He alluded to Mr. Stewart's well-known capabilities as a teacher, his labours in comparative anatomy, and his success as curator of the museum. Dr. Ord went on to say that, much as his loss was regretted, a loss still acutely felt, all his old friends were pleased to see him in the important position of conservator of the museum of the Royal College of Surgeons. The fact that there were as many as 244 subscribers to the testimonial showed the widespread feeling of esteem entertained for Mr. Stewart. The list of prize-winners will, as usual, be published, along with those connected with other hospitals, in our Students' Number.

SANITARY INSTITUTE OF GREAT BRITAIN. — The autumn congress will be held at Leicester from September 22nd to 26th. A Health Exhibition, including sanitary apparatus and appliances in connexion with the Congress, will be held from September 22nd to October 10th.

PARLIAMENTARY ELECTIONS (MEDICAL RELIEF) BILL. In the House of Commons on the 15th inst., Mr. J. Collings obtained leave to bring in a Bill to provide that no person shall be disqualified from voting at Parliamentary elections by the receipt of medical relief for himself or his family. The Bill was read a first time.

WESTMINSTER HOSPITAL MEDICAL SCHOOL.—We understand that the new medical school in Caxton-street will be ready for opening by the commencement of the ensuing winter session (October 1st), and that the senior surgeon of the hospital, Mr. George Cowell, has been appointed to deliver the introductory lecture.

THE Lyons Society for the Protection of Children has offered prizes of gold medals for the years 1886 and 1887 for the best paper on the following subjects:—1. The different methods of vaccination; the age at which vaccination is best performed; and the prejudices to be combated in reference to the operation. 2. The study upon the influence of occupation upon pregnancy in women, the progress of pregnancy, and the vitality and health of children.

PRINTERS' PENSION CORPORATION.—At the fifty-eight anniversary festival of the Corporation which was recently held, it was stated that the needs of the Corporation were increasing rapidly, and that at the recent election of pensioners only twenty-one could be elected out of sixty-three deserving and necessitous candidates. The expenditure in pensions alone was £1900 per annum, a sum which was divided between nearly 150 pensioners, while the almshouses at Woodgreen afforded habitation for twenty-four inmates. During the evening subscriptions to the amount of £1018 were announced by the secretary.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH. -The usual monthly meeting of the members of this Association was held on the 11th inst., when Mr. Lawrence Booth read a paper on "Some Suggestions as to the Arrangement and Construction of Hospitals for Infectious Cases," illustrating his remarks by a series of drawings of an infectious hospital connected with Whittingham County Lunatic Asylum, now in course of erection, and of which he is the architect. A vote of thanks having been accorded to Mr. Booth for his paper, it was resolved to appoint a committee of five to confer with the London and other associations of the country with the view of improving the status of the medical officer.

Medical Appointments.

Information for this column must be sent DIRECT to the Office of THE LANCET before 9 o'clock on Thursday Morning at the latest.

BLACK, WM. G[illegible], M.R.C.S., has been appointed H[illegible] Surgeon to the Children's Hospital, Newcastle-on-Tyne, [illegible] term of office has expired.

C[illegible], H., M.R.C.S., has been appointed Clinical Assistant to the Surgical Out-patient Department, [illegible] Department, of the London Hospital.

H[illegible], CHARLES HENRY, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer of Health [illegible]

LAW[illegible], THOMAS C[illegible], M.R.C.S., L.S.A.Lond., has been appointed Medical Officer [illegible] District of the [illegible] Union, [illegible]

Leak, Hector, L.R.C.P.Lond., M.R.C.S., has been appointed Medical Officer for the Winsford District of the Northwich Union, vice A. P. Leak.

Limont, James, M.A., B.Sc., M.B., has been appointed Honorary Physician to the Newcastle-upon-Tyne Infirmary.

Lyle, Robert Charles, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Dunmow District and Workhouse, Dunmow Union, vice Clapham.

McMurray, John, M.D., M.Ch., M.A.O. Roy. Univ. Irel., has been appointed Assistant Medical Officer to the Parish Infirmary, Liverpool, vice J. G. Barns, L.R.C.P.Lond., M.R.C.S., resigned.

Pitt, George Newton, M.A., M.D., M.R.C.P., has been appointed Medical Registrar and Demonstrator of Practical Medicine to Guy's Hospital.

Roberts, Henry William, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Deptford District, Greenwich.

Smith, D. Chadwick, M.D., B.Ch.Dub., has been appointed Medical Officer of Health for the Lowestoft Urban and Rural (Joint) Sanitary Authorities.

Stacpoole, Adam Richard, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Officer and Vaccinator for the District of Corbar, New South Wales.

Stewart, G. Eland, M.R.C.S., L.R.C.P., has been appointed Resident Medical Officer to the Hospital for Diseases of the Throat, Golden-square.

Taylor, Moses, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Cannock District of the Cannock Union, vice Blackford.

Tibbits, Walter Hugh, M.R.C.S., has been appointed Government Medical Officer and Vaccinator for the Districts of Manly and Pittwater, New South Wales.

Welsh, R. C., M.B., has been appointed House-Surgeon to the North Dispensary, Liverpool, vice John McMurray, M.D., elected to the Liverpool Parish Infirmary,

Births, Marriages, and Deaths.

BIRTHS.

Benton.—At Bennett-street, St. James's, the wife of Samuel Benton, M.R.C.S., of a son.

Bourke.—On the 10th inst., at Longridge-road, South Kensington, the wife of Surgeon Ulick J. Bourke, Army Medical Staff, of a son.

Cæsar.—On the 13th inst., at Minster in Sheppey, Kent, the wife of Julius Cæsar, L.R.C.P. &c., of a daughter (still-born).

Emerson.—On the 23rd ult., at Hampstead, the wife of P. H. Emerson, B.A., M.B.Cantab., of a daughter.

Hallows.—On the 13th inst., at Doncaster, the wife of H. Pinnington Hallows, M.B., C.M., L.R.C.S.E., of a son.

Lloyd.—On the 5th inst., at Ty'ncoed, Barmouth, the wife of H. J. Lloyd, L.R.C.P. &c., of a son.

Macdowell.—On the 15th inst., at Otter Holt, Carlow, Ireland, the wife of Charles Macdowell, M.D., F.R.C.S., of a son.

Nicholls.—On the 23rd ult., at Dominica, West Indies, the wife of H. A. Alford Nicholls, M.D., F.L.S., of a son.

Smith.—On the 14th inst., at Russell-road, Kensington, the wife of W. Towers Smith, M.R.C.S., of a daughter.

MARRIAGES.

Gibb—Adamson.—On the 10th inst., at Ava Lodge, Magdalen-green, Dundee, William Gibb, L.R.C.P.Ed. &c., to Annie, second daughter of John Adamson, Esq.

Harper—Sutcliffe.—On the 3rd inst., at the Parish Church, Burnley, Robert Russell Harper, L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., of Littlebury House, Holbeach, only son of R. Harper, Esq., J.P., of Holbeach House, Lincolnshire, to Marian, only daughter of Edward Sutcliffe, Esq., of Holme View, Burnley.

Macdonnell—Barlow.—On the 11th inst., at the Church of St. John the Evangelist, Montreal, Richard Lea Macdonnell, M.D., son of the late Dr. Robert Lea MacDonnell, of Montreal, to Constance Anne, only daughter of the late Francis W. Barlow, Esq., of Bickley, Kent.

DEATHS.

Baillie.—On the 11th inst., at his residence, 87, Prince of Wales-road, Haverstock-hill, N.W., Dr. Benjamin Tillyer Blunt Baillie, aged 57.

Bernard.—On the 10th inst., at Durrance House, Hemel Hempstead, suddenly, George Peterson Bernard, F.R.C.S.

Carver.—On the 16th inst., at Fairlawn, Fulham, Mary, the dearly loved wife of Eustace John Carver, aged 38.

Gray.—On the 6th inst., at Lansdowne House, Essex-road, London, Thomas Scott Gray, M.D., M.R.C.S., L.S.A.Lond., aged 59.

Holton.—On the 12th inst., at Randolph-gardens, Kilburn, Francis Holton, M.B., Surgeon-General (retired), Army Medical Service, aged 59.

Lobb.—On the 13th inst., at The Hermitage, Wyer Hall, Edmonton, William Lobb, M.D., in his 82nd year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(*Taken daily at 8.30 a.m. by Steward's Instruments.*)

The Lancet Office, June 18th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
June 12	30·38	W.	56	53	92	76	50	...	Hazy
,, 13	30·21	S.E.	65	57	110	79	56	...	Hazy
,, 14	30·20	E.	75	62	112	82	55	...	Bright
,, 15	30·08	N.E.	59	55	104	71	54	...	Overcast
,, 16	30·06	E.	62	55	109	63	54	...	Cloudy
,, 17	29·85	E.	56	53	93	63	53	·13	Overcast
,, 18	29·99	W.	58	53	...	...	49	...	Hazy

Medical Diary for the ensuing Week.

Monday, June 22.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 P.M., and each day at the same hour.

St. Mark's Hospital.—Operations, 2 P.M., and on Tuesdays at the same hour.

Hospital for Women, Soho-square.—Operations, 2 P.M., and on Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Royal College of Surgeons of England.—4 P.M. Professor Charles Stewart: Inflammation.

Tuesday, June 23.

Guy's Hospital.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

St. Thomas's Hospital.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

Cancer Hospital, Brompton.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

Westminster Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 2.30 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and on Friday at the same hour.

Anthropological Institute of Great Britain and Ireland.—8 P.M. Lady Brassey: Exhibition of Objects of Ethnological Interest from Polynesia.—Miss North: Exhibition of Ethnological Objects from New Ireland.—Mr. Carl Lumholtz: Exhibition of Australian Implements.—Mr. H. P. Guppy: On the Physical Characteristics of the Natives of the Solomon Islands.—Mr. Abraham Hale: On the Sakais.—Mons. Jean L'Heureux: Notes on the Astronomical Customs and Religious Ideas of the Chokitapia or Blackfeet Indians.—Mr. Hyde Clarke: Observations on the Mexican Zodiac and Astrology.—Mr. James Dallas: On the Primary Divisions and Geographical Distribution of Mankind.

Wednesday, June 24.

National Orthopædic Hospital.—Operations, 10 A.M.

Middlesex Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

St. Mary's Hospital.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 P.M., and on Saturday at the same hour.

London Hospital.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

Great Northern Central Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operations, 2.30 P.M.

University College Hospital.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

Royal Free Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 3 to 4 P.M.

Royal College of Surgeons of England.—4 P.M. Professor Charles Stewart: Inflammation.

British Gynæcological Society.—8.30 P.M. Specimens will be shown. Adjourned Discussion on Dr. More Madden's paper on Fibro-myomata.

Thursday, June 25.

St. George's Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 P.M.

Charing-cross Hospital.—Operations, 2 P.M.

North-West London Hospital.—Operations, 2.30 P.M.

Friday, June 26.

St. George's Hospital.—Ophthalmic Operations, 1.30 P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 2 P.M.

Royal College of Surgeons of England.—4 P.M. *Professor Charles* Stewart: Inflammation.

Saturday, June 27.

King's College Hospital.—Operations, 1 P.M.

Royal Free Hospital.—Operations, 2 P.M.

Middlesex Hospital.—Operations, 2 P.M.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HONE STONES.

IT may be useful to some of our readers to have their attention directed to good and serviceable hones, specimens of which have been submitted to our inspection from the quarries of Mr. Montgomerie, of Dalmore, Stair, Ayrshire. The "Tam o' Shanter" hones are very neat in appearance, and for whetting delicate cutting instruments are decidedly useful and efficient. They may be obtained cased or uncased, and in different sizes.

Mr. Stretch Dowse.—We are not at present in possession of information beyond that given in our last issue.

Equality will be liable to duty for the whole of the vehicles.

THE TITLE OF "DOCTOR."

To the Editor of THE LANCET.

SIR,—To give the two London Colleges the power of granting a degree in Medicine, or the title "Doctor," would not only be a flagrant injustice to existing graduates, but would also be productive of much injury to all the universities, from Oxford downwards; and I cannot think that any one of the delegates from the Royal College of Physicians will be found so wanting in duty to his *alma mater* as to sanction any such gross violation of vested interests. It would practically be raising the status of the Colleges from licensing corporations to a university of one faculty only. Why should they be so favoured in being allowed to forego the responsibilities of faculties of arts, law, and science, without which there can be no *raison d'être* for any university? Let us suppose for a moment that every M.R.C.S. and L.R.C.P. will wake up some fine morning and have the right to dub himself "Doctor." Where will be the privilege when all distinction is abolished? Whose will be the benefit, if we except the door-plate engravers? In a word, the one reason for the present outcry is that the institution in Burlington-gardens has failed egregiously in its duty to the profession and the public. The true remedy for the grievances of non-graduates is the reform of the University of London; or its abolition, coupled with the establishment of a new body under a charter so framed that the lessons of the past fifty years should not have been learnt in vain.

I am, Sir, your obedient servant,

June 8th, 1885. L.R.C.P.Lond.

Mr. J. B. J. O'Meara must not be too much disturbed by the judgment of the lay press in such a case, especially after the expression of opinion of the Board. The patient had *only* to have requested a visit for one to be paid, and in the nature of the circumstances casual visits were not to be expected, though, of course, they would have been greatly appreciated.

Mr. George D[illegible] (Berlin).—The review has not escaped our notice.

"HEALTH ASSURANCE ASSOCIATIONS."

To the Editor of THE LANCET.

SIR,—Permit me to correct an error which occurs in my letter on this subject in your last issue. In the sentence, "The patient is brought into an intimate and friendly relation with his client," for "patient" read doctor.

I would just like to add explicitly that the way to nip these new associations in the bud is simply to adopt the system of health assurance in our practices; and lest there should be any of my professional brethren who do not know what health assurance is, or how it is practised, I may say that I shall be happy to send a copy of my pamphlet on the subject to any medical man who desires it, on receipt of a stamp for postage. Specimens of the printed forms employed in health assurance will be ready for distribution in the same way in about a fortnight.

I am, Sir, yours very truly,

W. FLEMING PHILLIPS.

St. Mary Bourne, Andover, Hants, June 13th, 1885.

TREATMENT OF DIPHTHERIA.

IN reply to the request of "L.S.A." in our last issue for information on this subject, we have received answers from several correspondents.

Mr. Walther states that cyanide of mercury in small doses has been given with marked success. He has employed it in doses varying from gr. $\frac{1}{48}$ to gr. $\frac{1}{16}$, according to age, every six hours for the first few days, followed by the perchloride of iron. Sulphurous acid was applied locally at the same time.

Mr. Dixon recommends the administration of belladonna, and remarks that as an antiseptic remedy of great value benzoate of sodium doubtless ranks amongst the first. A remedy he has employed with success is a mixture of chlorate of potash, perchloride of iron, and glycerine.

Mr. T. H. Sutell records the success which attended the administration of brandy very freely, emetics, and perchloride of iron (in milk, to cover the taste), and no interference with the throat.

Dr. Illingworth suggests the following prescription for children of from three to eight years:—Sodæ salicylatis, ʒss—ʒj; sp. am. aromat., ʒj—ʒij; syr., ℥ss; aq. ad ℥ij. M. et solve. Sig.: Capiat cochlearia parva secundis horis. He also expresses his intention of using in his next case of diphtheria a mixture of tannic and carbolic acids in glycerine, in the proportions of one part carbolic to twenty of glycerine and the usual one of tannic acid.

M.R.C.S.E. &c. suggests the use of the concentrated solution of pepsin as employed, and highly praised, by Dr. Edwin Rosenthal:—Jensen's pepsin, ʒj; acid. hydrochlor., gr. xx.; aquæ q. s. ft. ℥j. Apply to throat every hour. Support the powers of life by nutritious and stimulating liquid diet.

Mr. F. Porter Smith.—The case seems to be one of which the College ought undoubtedly to take notice.

Dr. H. M. Lawren (Cuthbert, Georgia).—We cannot promise insertion of the paper until the MS. is in hand.

FOR THE GOOD OF HUMANITY.

To the Editor of THE LANCET.

SIR,—Probably there is no class of men whose opinion is more generally sought and respected than that of the "family doctor"; and it appears to me that the subject whereupon that influence might have largest scope, and be the means of benefiting humanity to an almost inconceivable extent, is one which, except by a very *few*, is completely avoided. In a large and varied experience, it has appalled me to find how lamentably ignorant nine out of ten women are concerning the influence of the mother upon the fœtus. This is a subject upon which physiological research has resulted in an almost, if not quite, unanimous verdict, and it is barely conceivable that any physician who has conscientiously weighed the question can fail to see it his plain duty to use his influence and knowledge, justified by his profession, and probably by experience also, in one of the noblest causes for which men can toil—namely, the good of the race. In these days, when immorality is so rife and its consequences so inimical both to the individual and the State, it befits us to search deeply for the cause, and to ask ourselves what can we do, and, among medical men at any rate, the answer is not far to seek. It would be an easy matter to point out to mothers the absolute necessity of common-sense clothing and healthy exercise, for the perfect development of the child; the cultivation of lofty aims, and all we hold to be of the highest good, if they would wish to see them in the possession of their descendants; and just as they would avoid any depressing or frightful influence or sight, or any sudden surprise, so every other undesirable emotion is also to be guarded against, and the whole being brought into as perfect subjection to the will as possible. And there remains another even more important direction in which to urge the necessity of self-control. We all know too well the frightful results, among all classes, of juvenile vice, the hideous increase of juvenile prostitution. Where is the remedy? Education? It is too late! We must begin at generation. To go to the root of the matter. Who that has studied the question doubts for a moment that it is the violation of those laws which hold good throughout the whole animal creation, and which in the case of women only are broken, that it is the unrestraint of the sexual function during pregnancy that transmits to the fœtus abnormally developed tendencies in the organs of generation by the undue exercise of those organs in the mother when nature demands rest, thereby probably influencing the progeny to a greater extent than by the similar indulgence of any other mental or physical quality in proportion to the greater susceptibility of these organs to become exaggerated and abnormal in their action? It is even more important that these grave facts should be brought under the consideration of husbands; for in the case of the majority of women nature is a law to herself, and prompts abstinence. Doubtless the sin is one of ignorance, not intention; but the law remains, and the penalty also—"The sins of the fathers are visited on the children to the third and fourth generation." It is the everlasting strife between good and evil: whether man will transmit beneficial or harmful tendencies; whether his children shall be slaves to or masters of their passions; whether he will make it more or less easy for them to live pure and healthy lives, thus adding his quota towards the elevation of the race. No one has the same opportunity of spreading these great truths as those in the medical profession; therefore I take the liberty of begging that you will lay these suggestions before them by means of your valuable journal.

I am, Sir, yours faithfully,

Eastbourne, June 11th, 1885. J. T.

THE PROVIDENT SYSTEM AND THE OUT-PATIENT DEPARTMENT.

X. Y. Z. would like to know if in any case the provident dispensary system has been adopted by the out-patient department of a general hospital, and with what result.

H. J.—1. The question has been repeatedly answered in our columns.—2. Application might be made to the Registrar.

Alp.—Next week, if possible.

"TREATMENT OF ACUTE PERITONITIS BY ABDOMINAL SECTION."

To the Editor of THE LANCET.

SIR,—In a letter under the above heading in your last issue Mr. Lawson Tait gives the credit of first opening the abdomen "under acute symptoms" to Dr. Wiltshire. Dr. Wiltshire's case occurred in May, 1868. In December, 1864, my father, Dr. Keith, removed an ovarian tumour from a patient suffering from symptoms of the utmost gravity, due to peritonitis and gangrene of the tumour. That he did so deliberately is shown by the following extract from the report of the case, which appeared in THE LANCET of July 8th, 1865, nearly three years before Dr. Wiltshire's operation: "Though the practice adopted seemed at the time to be rash, and scarcely justifiable, yet it saved the life of the woman." Again, referring to this case in the *Edinburgh Medical Journal* of February, 1875, Dr. Keith says: "The pain was not relieved, abdominal distension from flatus became excessive, and typhoid symptoms rapidly set in. Fearing a repetition of the slow death process—which those who saw will not easily forget—ovariotomy was this time performed during the semi-delirium of septic fever. This was probably the first time that surgery broke in on an inflamed peritoneum, &c."

I am, Sir, your obedient servant,

Edinburgh, June 16th, 1885. SKENE KEITH, F.R.C.S.Ed.

An Army Doctor.—Why do not the medical officers take the matter into their own hands? If inquiry be made into what has been done on former occasions in reference to the grievance, the remedy will become readily apparent.

F. C.—The method of announcement is certainly objectionable.

CHRONIC ECZEMA OF THE AURICLE.

To the Editor of THE LANCET.

SIR,—I have lately had several cases of inveterate eczema of the auricle. In all the disease had lasted for years, and had resisted all the ordinary modes of treatment. I do not think any of the patients were gouty or scrofulous. In each case a speedy and perfect cure was accomplished by blistering the affected surface. Two or three applications of a weak solution of croton oil in absolute alcohol will suffice. It appears to me that in these cases the disease has no constitutional origin, but is due to a local neurasthenia, and hence the failure of the usual applications and internal remedies.

I am, Sir, your obedient servant,

Wick, June 11th, 1885. A. G. AULD, M.B.

PORTER, GARDENER, *AND* DISPENSER.

To the Editor of THE LANCET.

SIR,—I enclose an advertisement which appeared in last week's *Pharmaceutical Journal*, which will show to what low degree the art of dispensing has fallen.

"A Porter and Gardener (one who can Dispense Medicines preferred), at the Grantham Cottage Hospital.—Apply, stating age, whether married, wages required, and other particulars, to G. W. G. Beaumont, Hon. Sec., Hospital, Grantham."

I am, Sir, yours obediently,

Marylebone-road, N.W., June 15th, 1885. JOHN WOODLAND.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Elder, Nottingham; Mr. Lawson Tait, Birmingham; Professor Buchanan, Glasgow; Dr. Cruise, Dublin; Mr. Dalby, London; Dr. Cobbold, London; Mr. Gardner, London; Mr. H. R. Davies, London; Mr. W. A. Ellis, London; Mr. Skene Keith, Edinburgh; Dr. Althaus, London; Dr. H. B. Baker, Lansing, Michigan; Mr. H. Hawkins; Mr. F. Fox, Strathpeffar; Dr. H. M. Lawson, Cuthbert, Ga.; Mr. J. Marshall, Glasgow; Mr. Auld, Wick; Mr. Bruce Joy, London; Mr. G. Duncan, Berlin; Dr. R. T. Cooper, London; Mr. Hopkins, London; Mr. T. H. Sawtell, London; Mr. J. Walther, Eastbourne; Dr. Roman von Baracz, Lemberg; Dr. S. Dowse, London; Mr. D'Orsey; Mr. Coates, Sirhowy; Mr. Williams, Much Hadham; Mr. Wood, Yokohama; Mr. George, Liverpool; Mr. Stilliard, Birmingham; Dr. Gamgee, Birmingham; Dr. Emerson, Southwold; Messrs. Waterston and Sons, Edinburgh; Messrs. Moir and Son, London; Messrs. Kilner Bros., London; Mr. Pratt, London; Mr. Thomas, Birmingham; Mr. Banks, London; Dr. Walker, Peterboro'; Messrs. Manlove and Co., Notts; Messrs. Lee and Martin, Birmingham; Mr. Earp, Notts; Dr. Hawks, Liverpool; Mr. Walsh, Cramlington; Mr. Meadows, Hastings; Mrs. Tillett, Dudley; Mr. Langdale, London; Baroness De Yreurs, Paris; Dr. B. Squire, London; Dr. Morelli, Naples; Mr. Wedmore, Queensland; Messrs. Christy and Co., London; Mr. T. Edwards, Harrold; Dr. Heywood Smith, London; Mr. Porter Smith, Shepton Mallet; Dr. Wood, Douglas; Mr. J. Dixon, Warboys; Mr. Berdoe, London; Dr. J. Fitzpatrick, London; Mr. Short, London; Mr. R. Jones, Liverpool; Dr. Dawson Burns, London; Mr. J. Woodland, London; Mr. Parker, Keighley; Dr. Thompson, Lightburne; Mr. Godfrey, Balham; Dr. Boyle, Cape of Good Hope; Mr. Phillips, London; Mr. H. Kimpton, London; Mr. Meade; Messrs. Beal and Co., Brighton; Mr. Cook, Lowestoft; Mr. Leaver, Stratford-on-Avon; Miss Sidney, Brighton; Messrs. Thomson and Co.; Mr. Scott, Manchester; Mr. Hunter; Dr. Robertson, Kimberley; F. J. H., Liverpool; Fiat Justitia, Ruat Cœlum; Equality; M. S. D.; Cantab.; An Army Doctor; J. H. H., Droitwich; Judex.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Samuel; Mr. Rainer, Ipswich; Mr. Wheeler, Whitley; Mr. Newsholme, Sheffield; Mr. Hallam, Middlesbrough; Mr. Glenny, Crobus; Mrs. Long, Mere; Dr. Gibb, Dundee; Mr. Lewis, Birmingham; Mr. Archer, Alnwick; Mr. Priestley, Ilfracombe; Dr. Yelf; Mr. Lloyd, Barmouth; Dr. Betts, Lincoln; Mr. Hallows, Doncaster; Mrs. Salvin, Haslemere; Mr. Ellery, Plymouth; Mr. Saunders, Bath; Mr. Hunt, Hull; Mr. Somerville, Edinburgh; Mr. Bowdige, Northampton; Mr. Atkinson, Rippenden; Dr. Langford, London; Messrs. Roberts and Co., London; Dr. J. Cæsar, Minster; Mrs. James, St. John's-wood; Dr. Burnes, Holloway; Mr. Peters, Lambeth; Dr. Spender, Bath; A. B., Tewkesbury; R. T. C.; J. H. A., Ware; June, Chester; A. B., Hemel Hemstead; W. L. J., Rhyl; A. G. W.; M.D., Draycott; M., Edinburgh; Medicus, Steeple Aston; Medicus, Newcastle-on-Tyne; Medicus, Exeter; F. C., Halifax; L.R.C.P., Manchester; Climax; Medicus, Notts; Medicus, Manchester; Medicus, Stockport; D. R., Stoke Newington; M.B., Rochdale; Medicus, Llandrindod; G., Stoke-on-Trent; B. D., Aberdeen; Medicus, Ebbw Vale; J B., Liverpool; A. B. C., London; H. R., Birmingham; Beta, Carnforth; Gamma, Exeter; Medicus, Surbiton; The Secretary, Guest Hospital; S. S., Skipton; Cortex; S. A.; W. P.; Alpha, Brideside; Omega; A. A., Birmingham; X. Y.

Church of England Temperance Chronicle, Manchester Courier, Argonaut, Daily Alta California, Galloway Advertiser, Yorkshire Post, Beverley Guardian, Eastern Daily Express, Birkenhead News, Sunday Closing Reporter, Kimberley Diamond Fields Advertiser, Diamond Fields Times, Kimberley Daily Independent, &c., have been received.

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Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.

ABSTRACT OF TWO

Clinical Lectures

ON

INTRA-CRANIAL SYPHILIS.

Delivered in the Western Infirmary of Glasgow.

By DR. McCALL ANDERSON,

PROFESSOR OF CLINICAL MEDICINE IN THE UNIVERSITY OF GLASGOW.

LECTURE I.

Gentlemen,—We have at present in the wards three illustrations of intra-cranial disease which, while they present certain features in common, differ considerably from one another in respect to their symptomatology; and yet, as we shall see, they are but branches of one and the same parent stem.

But first of all let me refer to a case of a similar nature which some of the senior students had the opportunity of seeing, the patient having been admitted into Ward 9 on March 30th, 1882. This man—who was twenty-nine years of age, and a grinder by occupation—was then suffering from left-sided hemiplegia. He informed us that for six months he had been troubled with severe and steadily increasing headache, which was limited to the left side. Four days before he came to us he was, in addition, quite suddenly seized with paralysis of the left arm and leg, so that he was unable to walk, and the day following it was observed that he could not converse, but could only answer "Eh!" to every question that was put to him. The day before admission, however, this symptom had in great measure disappeared, although when he came into the infirmary he had a dazed and stupid look, and answered questions in few words or sometimes not at all, while the information which he vouchsafed was found afterwards to be quite erroneous. For a day or two also before admission the paralysis, which was quite complete at first, except as regards the side of the face which was only partially paralysed, became much less pronounced, so that he could move the arm a little and the leg with considerable freedom. On the 8th of April, nine days after he came under observation, he became insensible, the loss of consciousness lasting for about a quarter of an hour, during which time there were convulsive movements of the arm and leg. On recovering consciousness it was found that the paralysis was greatly aggravated, he being unable to move either the arm or leg. The sensation, too, on the same side of the body was rather defective as regards touch, pain, and temperature. Thus, when slightly pricked with a needle, he thought he was touched with the hand, and when hot and cold sponges were applied he could discriminate cold, but not heat.

The symptoms present in this case showed that the lesion was situated on the right side of the brain, so as to involve the motor, and to a less extent the sensory tract. As regards the nature of the lesion, embolism as a cause of the hemiplegia was very unlikely, because it is then generally right-sided; because of the absence of any evidence of deposits on the mitral or aortic valves such as most commonly yield emboli; and because there were no signs of embolism of other organs. The age of the patient, and the absence of symptoms of kidney disease or of degeneration of vessels, rendered a cerebral hæmorrhage improbable. On the other hand, the intense and long-continued hemicrania led to the suspicion that we had to deal with a cerebral tumour, and that it was of a syphilitic nature we concluded from the following facts. The hemicrania was markedly nocturnal in character, as we so often find in syphilitic cases; the skin had a dirty, earthy, pallid appearance; the inguinal and arm glands were distinctly enlarged; and a large white scar about the size of a sixpence, with dark edges, was discovered about the root of the penis, which we were told on inquiry was the result of a chancre which he had five years before. This view was further confirmed by the result of treatment, which consisted in the rubbing of a drachm of strong mercurial ointment into a fresh part of the skin every day. It was commenced on [illegible], omitted by mistake from the 10th to the 20th, and finally stopped on June 2nd. On June 23rd, when he left the hospital, he was a very different man. The intelligence, which was at first so defective, was perfect in every respect, the nocturnal hemicrania had long since disappeared, the paralysis of the arm was very slight, as he could move it freely in all directions, and the dynamometer, on which at first the left hand made no impression, registered thirty-five kilogrammes. The paralysis of the leg was likewise slight, although rather more pronounced than that of the arm, and he walked a little lame and rather stiffly. This last symptom, taken along with the existence of some tremor when the limb was manipulated, and exaggeration of the patellar-tendon reflex (the ankle clonus was not present), rendered it probable that secondary sclerosis of the lateral column of the cord had to a certain extent occurred. As this lesion, although secondary to the lesion in the brain, was of a non-syphilitic character, it could not be expected to be benefited by anti-syphilitic treatment.

We now pass on to the consideration of the cases at present in the wards. The first to be admitted (Feb. 10th, 1885) was a blacksmith, thirty-eight years of age. He complained chiefly of severe pain in the forehead and upper part of the head, which had been present for about four months. The family history was good. Twelve years ago he suffered from an attack of gonorrhœa, which lasted about three or four months, and did not appear to have left any bad results. About eight years ago he had what he calls rheumatism, describing it as constant pains in the bones and joints, becoming very bad on movement and markedly worst at night. Three years ago he had a painful affection of the throat lasting for about a year. With the above exceptions he had always been a healthy man previous to the onset of the present illness. About four months ago he was suddenly seized, while sitting at the fire, with a violent pain in the forehead above the left eye. It lasted several hours, and he was then free of it for about a fortnight. After that he had repeated attacks, and noticed that the intervals between them gradually became shorter, and since the beginning of the year they had been almost constantly present, although with occasional great exacerbations. It was worse at night. The pain above described was often very intense, so much so as altogether to prevent sleep, and frequently to produce delirium. About the beginning of January his eyesight became somewhat impaired, so that he was unable to read as well as he used to do. On looking at anything steadily for a time, his vision became dim, as if a "scum" was before his eyes, and sometimes there was a feeling of pressure in them, especially on attempting to read. He professed never to have had any eruption on the skin or falling out of the hair. During the three months previous to admission he had lost flesh very much, having become, as he thought, about three stones lighter than formerly. A few scars were observed on the legs, which he said were due to the application of croton oil. The scar on the right leg, a little above the outer malleolus, was distinctly coppery in tint. There was a rounded and depressed cicatrix on the glans penis a little above and to the left of the frænum. This he attributed to a burn from a piece of live coal. The foreskin was adherent to the glans at the sulcus. There were no scars at the angles of the mouth. There was no paralysis of the muscles of the face or eyelids, save a slight drooping of the left upper lid. The eyeballs were slightly prominent, especially the right, but this condition, he said, had been present since childhood. The tongue, on being protruded, appeared to be slightly drawn to the left side. On tapping all over the head two spots were found about two inches and a half above the outer angle of each eye, which were distinctly tender. He could hear the ticking of a watch better when placed opposite the ear than on the temple. The greatest distance he could hear the watch with the left ear was eighteen inches, with the right twenty-four. The smallest type he could read on admission was a double small pica, whilst before the illness he could read the ordinary type of a newspaper, which is only half the size of the above (see Dr. [illegible]).

[illegible]

No. [illegible]

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Smell and taste seemed to be normal, and the dynamometer registered 105 kilogrammes with each hand.

A consideration of the history and symptoms present in this case led to the conclusion that we had to deal with intra-cranial syphilis. Before his admission into the infirmary he had been under the care of half a dozen medical men in succession, and appears to have been treated for the most part by means of quinine and other anti-neuralgic remedies. His last medical adviser, however, evidently suspected the syphilitic nature of his complaint, and gave him iodide of potassium. He took it at first in doses of ten grains three times a day, but for a week before his admission the dose was increased to thirty grains. This had not the slightest effect upon the pain or other symptoms. Accordingly, on the 12th of February, he was ordered to rub into the skin daily one drachm of Shoemaker's mercurious oleate ointment, while thirty minims of paraldehyde were prescribed at night to procure sleep. In a few days the pain had completely disappeared, and up to the present date (April 1st) he has remained perfectly well. The mercurial treatment is, however, being continued as a precautionary measure.[2]

WHY DOES SALICYLIC ACID CURE RHEUMATISM?

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(Concluded from p. 1121.)

IF, then, as I assert, uric acid or its antecedent is the *materies morbi* which develops rheumatic fever, and if, as I have previously advocated, it is according to the accepted opinion the cause of gout, why should it in some individuals produce this disorder and in others rheumatism?

Let us in the first place consider what, under the normal state of things, is the effect of cold and heat applied to the surface of the body. The effect, as you know, is very different as regards cold-blooded and warm-blooded animals. External cold diminishes and heat increases the metabolic activity of the cold-blooded animal, acting like a mixture of dead substances in a chemical retort. But in a warm-blooded animal, within certain limits, cold increases and heat diminishes the bodily metabolism, as shown by the increased or diminished consumption of oxygen and production of carbonic acid as the temperature falls or rises. There is obviously a mechanism of some kind counteracting and indeed overcoming those more direct effects which alone obtain in cold-blooded animals. But under the influence of urari, which paralyses the end-organs of the muscular nerves, a warm-blooded animal behaves as regards its bodily metabolism under the influence of external cold and heat like a cold-blooded animal. "We can best explain these results by supposing that under normal conditions the muscles which, as we have seen, contribute so largely to the total heat of the body are placed, by means of these motor nerves and the central nervous system, in some special connexion with the skin, so that a lowering of the temperature of the skin leads to an increase, while a heightening of the temperature leads to a decrease, of the muscular metabolism. Further, though the matter has not been fully worked out, the centre of this thermo-taxic reflex mechanism appears to be placed above the medulla oblongata, possibly in the region of the pons Varolii. When urari is given the reflex chain is broken at its muscular end, when the spinal cord is divided the break is nearer the centre."[1]

How does this bear upon rheumatism? An individual is exposed to a cold draught or gets wet; the surface is chilled; the cutaneous vascular areas are constricted; by reflex action through the vaso-motor system the splanchnic vascular areas and the vessels of the muscular areas are dilated; the vaso-motor nerves distributed to these parts are paralysed, so to speak; with this paralysis of the vaso-motor nerves of the parts there is not only a dilatation of the vessels in the part, but there is also a weakening of the power by which the albuminous molecules are held together, and from both causes heat is developed. The normal change of the cyan-alcohols into cyanamides, and amido-acids with the ultimate oxidation of the latter, is modified. The molecules $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ and $C_2H_4\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ become detached from the benzene nucleus, and more or less from each other, and by hydration (by which heat is developed) form substances—glycollic acid and lactic acid—which are more easily oxidised than the amido-bodies. The oxygen, though conveyed in larger quantities than normal by the increased blood-supply to the tissue, is completely used up in oxidising the glycollic and lactic acids which have been formed; the excess of lactic acid and the glycocine (which has also been formed) are unoxidised and pass into the circulation. Now, in a normal or healthy state of things, the irritating or stimulating cause acting on the skin being removed, reaction would be set up there, the cutaneous vascular area would dilate, and consequently the vessels of the muscular area would contract, and this latter contraction would be increased by the stimulating effect of the glycocine or resulting uric acid, which, being a morbid product, would stimulate, as in gout, that portion of the nervous system which controls the nutrition of the joints just in the same way as carbonic acid in the blood stimulates the respiratory centre. In this way less blood would go to the muscular area, and the albuminous molecules would again be held more firmly together and undergo the normal changes, the uric acid being meanwhile excreted by the kidneys and the lactic acid by the skin. I have here drawn you a picture of an ordinary feverish cold—the primary chill, the ensuing febrile condition, the elimination of lithates with the subsidence of the attack.

But suppose the individual who is exposed to damp or cold has been previously reduced in strength, is tired out or exhausted—that is to say, his vaso-motor system is in a weak state, the weakness either developed from the above causes, or it may be inherited. Then following the chill there would be the same effects produced as I have above described, but the vaso-motor nerves regulating the vessels of the muscular area would be more completely paralysed, and when reaction set in on the surface of the skin there would be less power in the muscular nerves to recover from that paralysed condition; and more than this, the central portion being exhausted, the stimulus of glycocine or uric acid produces not stimulation, but exhaustion.

Let me illustrate what I mean by reference to the sciatic nerve.

"Division of the sciatic nerve of a mammal causes dilatation of the small arteries of the foot and leg. Where the condition of the circulation can be readily examined, as, for instance, in the hairless balls of the toes, especially when these are not pigmented, the vessels are seen to be dilated and injected, and a thermometer placed between the toes shows a rise of temperature amounting, it may be, to several degrees.[2] But the dilatation so caused after a few days disappears; the foot on the side on which the nerve was divided becomes not only as cool and pale, but frequently cooler and paler than the foot on the sound side. If the peripheral portion of the divided nerve be stimulated with an interrupted current immediately or very shortly after division, the dilatation due to the division gives place to constriction; the sciatic nerve acts then quite like the cervical sympathetic, except perhaps that this artificial constriction cannot be maintained for so long a time, and is very apt to be followed by increased dilatation. If, however, the stimulation be deferred for some days, until the dilatation has given place to a returning constriction, the effect is not constriction, but dilatation; the nerve then acts, so far as its vaso-motor fibres are concerned, like a muscular nerve, and not like the cervical sympathetic.[3] So also with regard to the mylohyoid muscle. Section of the nerve produces dilatation, but the dilatation is transient. The vessels speedily return to their former calibre, and then it is found that stimulation, of whatever strength, of the peripheral portion of the divided nerve brings about not constriction, but dilatation. If then the vaso-motor fibres of the muscular nerves have been weakened, the result would be that the normal stimulating effect of uric acid on the motor nerves generally

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disc; but no distinct evidence of there having been choked disc or engorged optic nerve, the disturbance not being more than is sometimes found in a high degree of hypermetropia. The defect of vision which he complains of is to be referred to deficient power of accommodation rather than to actual loss of accommodation. This deficient power of accommodation is sometimes seen to follow a shock to the nervous system."

[2] This patient was seen on April 27th, and was found to be quite as well as at the beginning of the month.

[1] Foster's Physiology, 4th edition, p. 467.

[2] Ibid., 4th ed., p. 130

[3] Ibid., p. 2[illegible].

would be transformed into a depressing or paralysing effect on the enfeebled nerves, the vessels of the muscular area would be still further dilated, the albuminous molecules would be loosened, hydration and oxidation would go on causing fresh development of heat, there would be the continuous formation of uric acid and lactic acid, the uric acid accumulating in the system, and producing its deleterious effect and modifying the function of the nervous system; the lactic acid dilating the smaller arteries[4] and stimulating the sweat centres, passing off in part by the skin. With increased stimulation of the paralysed centre of the muscular nerves complete dilatation of the vessels in the muscular area will take place, the albuminous molecules now fall completely asunder, the $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ and $C_2H_4\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ being entirely hydrated into glycollic acid and lactic acid with the rapid production of heat, and the heat is further developed by the ready oxidation of these products. In this way the so-called hyperpyrexia of rheumatic fever is produced.

But whilst uric acid affects in this way the vaso-motor fibres of muscular nerves, it also affects the nutrition of the joints. We see that in gout; it stimulates and alters the nutrition of the part, and as the blood contains an abnormal substance, this is deposited about the joint in the form of urate of soda. Uric acid increases, too, the oxidation going on in the part, for there is increased heat. These changes are the result of the irritative effect of the uric acid upon the neighbourhood of the medulla oblongata and motor tract. Why I fix upon this as the part specially affected, I will explain presently. But at the age when gout appears, the sympathetic system and the vaso-motor fibres are less susceptible than in former years to irritative causes. Cold applied to the surface of the body in a person of advanced years does not result in increased heat or reaction, but produces internal congestion, pneumonia, hæmaturia, diarrhœa, &c. In gout the uric acid is the result of modified innervation of the liver, causing a paralysis of the hepatic vessels and lessening of the normal metabolic changes, and so there is non-transformation of the glycocine and the consequent formation of uric acid. In rheumatism the glycocine results from changes in the vascular area and in the metabolism of the muscles, and along with its formation there is also the formation of lactic acid by hydration, both from the cyan-alcohol $CH_2 . CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ and the cyan-alcohol $CH_3 . CH\left\{\begin{matrix}OH\\CN\end{matrix}\right.$; the nutrition of the joint is modified, as in gout, by the stimulating effect of the uric acid on the centre of the muscular nerves, but the nutrition is further modified by the presence of the lactic acid in the blood, producing dilatation of the arterioles, more particularly round the affected parts. For both diseases therefore the treatment resolves itself into neutralising or getting rid of the glycocine, and so preventing the formation of uric acid and putting a stop to the irritating effect of it on the centre of the muscular nerves. This is effected in large measure by salicylic acid. The glycocine and some portion of the lactic acid in the muscular tissues is derived, as I have shown, from methene cyan-alcohol, $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$. The salicylic acid combines with this as it parts from the albuminous compound forming

$$\begin{matrix}CH_2\\C_6H_4\end{matrix}\left\{\begin{matrix}DH\\CN . OH\\COOH\end{matrix}\right.$$

which produces no irritating effect on the nervous centre, and as it passes out of the body is transformed, as is previously shown, into $CH_2(NH . C_7H_6O_2)COOH$, or salicyluric acid.

But along with this remedy the judicious use of cholagogue purgatives will be of great benefit, by eliminating the bile from the intestines, and so removing a quantity of glycocine from the system. And, lastly, the proper diet to employ is one as free from glycocine as possible—that is, one consisting chiefly or entirely of milk and farinaceous food. From what I have said it is also easy to understand how a number of blisters applied near the affected joints may often cure the disease—viz., by reflex action on the vessels of the muscular area, causing them to contract, and so diminishing the metabolism and lessening the formation of glycocine.

A word or two, lastly, with regard of the pathology of that form of diabetes which originates in the muscular tissue. In my previous paper I have indicated the way in which I think it probable that glucose may in the living body be derived from albuminous material—namely, by the separation of the molecules of $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ from the benzene nucleus, their hydration into glycollic acid, $CH_2\left\{\begin{matrix}OH\\COOH\end{matrix}\right.$, and their oxidation into CO_2 and methyl aldehyde, $H . CHO$, and water; the oxidation being arrested here, and condensation of six molecules of the aldehyde taking place, forming $C_6H_{12}O_6$, or glucose. Here we have, then, a condition resembling somewhat that associated with hyperpyrexia, except that the oxidation is in some measure inhibited. The vaso-motor fibres of the muscular nerve are paralysed, the molecules $CH_2\left\{\begin{matrix}OH\\CN\end{matrix}\right.$ are detached and hydrated, but only *partially* oxidised; the tissue is, so to speak, partially urarised, the aldehyde is not oxidised, but condenses into glucose. In urari poisoning sugar appears in the urine, though "the exact way in which this form of diabetes is brought about has not yet been clearly made out."[5]

Now, you will find that in some forms of diabetes salicylic acid is of the greatest importance, whereas in others no good results from its use. The urine in the former cases contains often, in addition to glucose, an excess of uric acid, and the patients suffer from neuralgic pains in the joints and limbs. Their diabetes is said to be "gouty"; but it seems to me that the presence of the glucose in the urine is due to the uric acid and *some* of the muscular tissue, in the manner above indicated.

Gentlemen, I have already trespassed upon your patience too long; I will, therefore, only very briefly indicate on what grounds I localise that portion of the nervous system which controls the nutrition of the joints, and the function of which is affected by uric acid, about the medulla oblongata and the motor tract.

1. Rheumatism not infrequently after a short interval follows tonsillitis. Now, we may assume either that the condition of the central nervous system in the individuals so affected is such that the slight injurious influences acting upon that portion of the central nervous system will produce an attack of quinsy, whereas more severe injurious influences will cause rheumatic fever; or we may assume that in quinsy the irritation of the nerves distributed to the tonsils not only affects the central nervous system at the origin of the roots of the nerves supplying the irritated part, but through the sympathetic nervous ganglia the irritation radiates to other parts of the nervous system which are in connexion with that ganglion. Either hypothesis will answer my purpose. The tonsillar nerves are derived from the fifth nerve—the middle descending branch from Meckel's ganglion—and from the glosso-pharyngeal portion of the eighth nerve. This branch of the fifth, to which I have referred, is derived from the larger root of the nerve which may be traced back to the lateral tract of the medulla oblongata immediately behind the olivary body, and is connected with the grey nucleus at the back part of the medulla between the fasciculi teretes and the restiform columns. The deep origin of the glosso-pharyngeal may be traced through the fasciculi of the lateral tract to a nucleus of grey matter at the lower part of the floor of the fourth ventricle, external to the fasciculi teretes. Both these nerves receive filaments from the superior cervical ganglion of the sympathetic.

2. In locomotor ataxy, associated with sclerosis of the posterior and lateral columns of the spinal cord, the joint affection known under the name of Charcot's ataxic arthritis sometimes presents itself. At the present moment we have in the hospital here a case of this kind, showing very conclusively the connexion between swelling of the knee-joint and irritation at the root of the fifth nerve, and in particular of the root of the anterior dental branch.

P. R——, aged fifty-nine, was admitted into Addenbrooke's Hospital Jan. 19th, 1885. At seventeen years of age he had pleurisy; during convalescence the right knee began to swell. Four years later the thigh was amputated owing to disease of the knee-joint. For twelve years after that he had good health, and then was suddenly attacked one night with sharp pain in the stump. In the morning he had neuralgia affecting the middle division of the fifth nerve. This case on regularly for eighteen months at 11 A.M., and since then has been very nearly continuous, but with exacerbations. He had ague when thirty-nine years old. At intervals there has been pain in the stump. He has had all his teeth removed from the upper jaw excepting one carious stump, on account of the pain, but without any relief. For the last three years he has noticed that at times he could not pass water, and at others it would run away from him. He has had aching pains in the left tibia for four years, but never had any lightning pains. In August, 1884, he suffered from violent abdominal pain lasting three months, and attended with sickness. He complains now of great pain in the upper gum, and compares it to that produced by a red-hot iron passed along the upper gum from the centre to the back, the attacks coming on at intervals of a few minutes, and lasting about ten seconds. On March 2nd he complained of numbness in the left leg, pain at the lower end of the femur and outer side of the thigh. There is no patellar reflex, no ankle clonus. The leg and thigh subsequently became œdematous and brawny, the knee-joint became distended and contained fluid, the ligaments very lax, allowing very free lateral movement; no creaking; no bony outgrowth was discovered. As this swelling of the leg and joint developed the pain in the jaw declined. On May 22nd the junctions of the ribs with the costal cartilages became swollen and very tender, and the patient also complained from time to time of aching pains in the shoulders. The joint is less swollen; the ribs are less tender just now. I have referred to the case as a good illustration of what I want to prove—viz., that irritation about the root of the fifth nerve will also sometimes give rise to modifications of nutrition in the ends of the bones or about the joints.

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[4] Gaskell: Journal of Physiology, vol. iii., p. 18.

[5] Foster's Physiology, 4th edit., p. [illegible]

Lastly, with regard to chorea. It is not difficult to see that, if the power of the vaso-motor fibres has been weakened, an irritation at the root of the fifth nerve may by radiating through the Gasserian ganglion or Meckel's ganglion, which are in connexion with the carotid plexus—a superior branch, that is, of the upper cervical ganglion—cause vascular dilatation and perivascular change in the track of the middle cerebral artery, and that these changes would produce the incoördinated movements of chorea. Dr. Dickinson has made out very clearly that it is in these parts and in the posterior and lateral parts of the grey matter and in the upper portions of the cord that vascular dilatation and perivascular change take place both in chorea and diabetes; and I venture to suggest that they are induced in the manner I have indicated.

NOTES OF VISITS TO CONTREXÉVILLE AND ROYAT-LES-BAINS.

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(Concluded from page 1123.)

BEFORE concluding, I should like to add some notes of a visit which I paid to Royat-les-Bains in June, 1884, and of the circumstances which brought me there.

One day, in the spring of last year, I happened to complain to my friend and colleague, Dr. Patrick Hayes, about the great annoyance I had suffered from eczema. This affection, presumed from many special symptoms to be of a gouty nature, had been treated in various ways, but with very partial success. Dr. Hayes told me that a patient of his, very similarly affected, had been sent by a London physician to Royat-les-Bains, and had been effectually cured. A few inquiries satisfied me that this mineral watering-place enjoyed a well-merited celebrity in the treatment of chronic forms of gout, and I felt that it was well worth my while to pay it a visit. Accordingly to Royat I went in June, 1884, and, to make a long story short, I was cured so completely that with a little attention to diet, and some other hygienic details, I have escaped ever since all annoyance from my troublesome ailment. It is but truthful to add that I have kept up the use of the waters, and observed the rules of life laid down for me. Many patients who are careless about these matters blame very unjustly the remedy which they unreasonably expect will cure them despite of themselves. Anyone who has undergone for years the indescribable worry of eczema will understand that I naturally feel very grateful to Royat, and am anxious to make known to the members of the Academy of Medicine in Ireland some details concerning it.

Leaving Paris by the Lyons Railway, a journey of some nine hours brought me to Clermont-Ferrand, the wealthy capital of the Auvergne district, and in ten minutes more I arrived at the picturesque village of Royat-les-Bains, one of the most celebrated mineral stations of France. Once settled in my hotel (Chabassière's), which it is but just to say combined every comfort with moderate charges, I sought the advice of Dr. Alexandre Petit, whose *brochure* on Royat I had already studied. Under his guidance I commenced the course, which lasted three weeks. The routine was much as follows:—At 7 A.M. I took a glass of the Eugénie water hot from the spring, then a reclining bath in the same water at a temperature of 95° F. After the bath I had another glass of the water. Then I returned to my hotel, and had coffee and strawberries. At one o'clock *déjeuner à la fourchette*; at 4 to 5 P.M. two glasses of the St. Mart spring, with fifteen minutes between; at 6 o'clock dinner. Thus I passed the days, spending the leisure intervals in exploring Royat and its environs, and in observing the use and effect of the waters. Day by day I improved in health and spirits, the eczema cleared off, and no new spots appeared. As already stated, I have remained well now just a year.

Royat-les-Bains is a village, consisting mainly of the *établissement* for the waters and baths, the hotels, boarding-houses and villas, which accommodate the visitors in the season, from May till the end of September. It is beautifully situated in the Auvergne mountains, about 1500 feet above the sea level, in a valley stretching from the base of the Puy-de-Dôme to Clermont-Ferrand, and following the course of a torrent of lava which at some remote age poured down from the neighbouring volcanoes, now completely extinct. The lowest portion of this valley conveys the Tiretaine, a mountain stream of some considerable size. All that a lovely country, an agreeable bracing climate, a wealth of interest, historical, geological, and botanical, combined with health-giving waters, can offer to satisfy the visitor will be found in plenty at Royat-les-Bains. To those who love mountain scenery as I do, no day spent there can feel irksome or tedious. It is right to add that it is a very quiet spot, to which the world of fashion has not yet penetrated; but its fame is of old standing, it is thoroughly appreciated by the medical faculty and people of France, and is yearly becoming better known to the world at large.

To prevent confusion about names, let me observe that Royat, the original village, is situated about fifteen minutes' walk higher up in the valley than Royat-les-Bains, and, though most interesting to visit, is not the mineral station known as Royat. The original village is evidently of great antiquity, resembling a miniature old Roman town. The photographs which I exhibit, many of which I took myself on the spot, show the curious old streets in which it abounds, and the castellated and battlemented church, a Romano-Byzantine edifice, dating from the twelfth century. There are clear evidences that the ancient Romans knew Royat well, and used its hot springs, both for separate baths and for the piscine or general swimming tank. Just below the railway bridge may be seen the remains of Roman baths and piscine, close to the St. Mart Spring, which were discovered in 1843. These are some of the many ruins which prove the Roman occupation of Royat in ancient times. The entire neighbourhood of this station abounds in interesting places, which serve to occupy the leisure hours of visitors to the waters.

Clermont-Ferrand, to which I have already alluded, is a little over a mile from Royat, and may be reached by omnibus in about ten minutes. Expeditions are made thither almost daily, and I know no more agreeable stroll than to wander through its beautiful Gothic cathedral, and then walk down to the Place Pascal, in which we find the statue of the great philosopher, so placed as to look to the distant towering Puy-de-Dôme, upon the heights of which he performed the experiments which led to such advance in barometric science. Selecting a clear day, a journey of some two hours and a half brings to the summit of the Puy, with its ruined Temple of Mercury, now replaced by an observatory, from which a magnificent view of the surrounding country stretches out on all sides. In every direction about Royat we find beautiful mountain passes through which to ride, drive, or walk; picturesque old towns and villages, and ruins of ancient castles and châteaux. Not a day of the whole course of three weeks need pass without a pleasant excursion amid scenery lovely enough to please every eye, and monuments of the old feudal times, like Tournoël, grim and gaunt enough to make one rejoice that we do not live in such wicked and awful days of savagery. I shall not attempt to enumerate the various points of interest around Royat, as the local guide-books offer all needful information, and I only allude to them here to illustrate the attractiveness of the place.

Let us now see what the waters of Royat are, what is their nature, and in what diseases they may be used with benefit. There are four springs, which much resemble each other, though differing in certain details[1]—namely, the Eugénie, the César, the St. Mart, and the St. Victor.

Taking the Eugénie spring as the one both typical and most important, let us examine its constitution. I append M. Lefort's analysis:—

Eugénie Spring (Temperature 95° F.).

Bicarbonate of soda	1·349
" potash	0·435
" lime	1·000
" magnesia	0·677
" iron	0·040
" manganese	traces
Sulphate of soda	0·185
Phosphate of soda	0·018
Arseniate of soda	0·004
Chloride of sodium	1·728
Iodide and bromide of sodium	traces
Silica...	0·156
Alumina and organic matters	traces
Chloride of lithium	0·037
Total solids	5·623
Free carbonic acid...	0·377

From the foregoing table it will be seen that this spring belongs to the class of alkaline-chlorinated waters, with the addition of salts of lithium, iron, and arsenic. The effects, used internally, may be surmised from its composition. It is stimulating to the circulation, diuretic, laxative, and tonic. The diuretic effect is the most manifest, often doubling the quantity of urine excreted, and at the same time raising the specific gravity one-third or more. In its diuretic properties I observed a strong similarity to our own mild sulphur water at Lisdoonvarna, which, although quite different chemically, is famous also for the cure of gouty and cutaneous affections. The laxative effect of the Eugénie water is mild, but unmistakable, the sulphate of soda mainly accomplishing this end. The tonic properties, due to iron and arsenic, are very pronounced, and, together with the chlorides, serve to mark the difference between Royat and the stronger and more purely alkaline springs, such as Vichy, Vals, Pongues, and others, indicating, moreover, their greater suitability for lymphatic and debilitated patients. In fact, for strumous subjects no waters, excepting alone those of La Bourboule, which is quite near, enjoy an equal reputation. At some future time I hope to bring La Bourboule under your notice. As already stated, the four springs of Royat, although resembling each other, differ in certain points. Thus we have seen the composition and effects of the Eugénie spring.

The César is the least mineralised of all these waters, but is very agreeable and piquant in flavour, and is found very useful in dyspepsia. It stimulates the mucous membrane of the stomach, improves the appetite, helps digestion, and increases the flow of bile and urine.

The St. Mart water contains a considerable quantity of chloride of lithium, and is particularly suited for gout and rheumatism and all allied affections.

The St. Victor spring is richest in iron, and is specially useful for anæmia, diseases of females, and for the weak and debilitated.

All these springs are used, according to the necessities of the case, in three different ways: first, internally; secondly, externally—as baths, reclining or swimming (piscine), and douches; and, thirdly, by inhalation while in a state of pulverisation or minute division. It is easy to see that with such a repertory of potent agents as these thermal waters afford, a judicious physician wields immense therapeutical power.

Let us now briefly enumerate the principal diseases in which they may be used with advantage. These may be divided, for practical purposes, into three great classes:—

1. *All forms of gout and rheumatism*, especially the atonic phases. It is almost needless to say that a mild alkaline water, modified by chloride of lithium and ferro-arsenical salts, is certain to benefit this class of ailments, and accordingly we find them improving from day to day at Royat, including gouty and rheumatic affections of joints, muscles, fasciæ, nerves, skin, especially eczema, gouty dyspepsia, gastralgia, asthma, and so forth.

2. *Anæmic and lymphatic affections.*—The combination of chloro-alkaline waters with iron and arsenic improves the appetite and digestion, and speedily reconstructs the blood in anæmia. It is found very useful also in atonic dyspepsia, and in all the nervous troubles appertaining thereto. For insomnia Royat enjoys a special and most favourable reputation.

3. *Affections of the throat, lungs, and uterus.*—The utility of the waters of Royat in this third class of ailments is what we might expect from the strong similarity between them and the waters of Ems—Royat being, in fact, the French counterpart of Ems, enjoying, however, the great advantage over the latter of a climate both bracing and tonic, in place of relaxing and debilitating. Accordingly, we find chronic affections of the larynx and pharynx, bronchial catarrh, asthma, and even the earlier stages of pulmonary phthisis, improving at Royat, and the crowds which frequent the inhaling rooms give proof of the beneficial results felt by all who resort to this form of medication. Chronic affections of the uterus are likewise found to derive immense service from these waters.

For myself, I am strongly disposed to believe that the efficacy of the waters of Royat are greatly augmented by the climate, which is, like all mountain air, revivifying in a marked degree. It is, moreover, temperate and dry, and its salubrity is proved by the abundance of fruit and flowers for which the whole district is celebrated. I shall not dilate further upon the virtues of Royat, trusting that I have already given a sufficiently clear outline to enable my hearers to select the cases best suited for the use of its waters.

I have to thank you, gentlemen, for the patience with which you have listened to me this evening. My earnest conviction of the great value of the waters of Contrexéville and Royat-les-Bains is the best excuse I can make for trespassing so long upon the attention of the Academy of Medicine in Ireland.

ON THE

TREATMENT OF BRONCHIAL ASTHMA AT MONT DORE, FRANCE.

BY DR. EMILE EMOND,
CONSULTING PHYSICIAN, MEMBER OF THE CLINICAL SOCIETY OF LONDON.

I PURPOSE in these few lines to extend to England the reputation of Mont Dore springs which has been long established in France, and to point out to the medical profession their powerful resources in the treatment of bronchial asthma.

Asthma is a capricious disease, having varieties and the most numerous forms, of which physicians have not yet given an accurate definition nor found out the medicine to cure it in spite of modern researches. We are amply provided with numerous remedial means, but the results are not always as precise as we could desire. "Asthma is an independent and essential disease, purely dynamic in nature, and not necessarily connected with any pathological lesion" (Thorowgood). It is spasmodic or catarrhal; but, whatever may be its form, G. Sée describes it as compounded of three elements: "a special intermittent dyspnœa, a bronchial exudation, and a secondary emphysema." Dyspnœa is the characteristic element; its form is always the same; its intensity only varies. On the contrary, catarrh may be of all forms; it appears in one with profuse running expectoration, clear, glairy, frothy, and pearly; in another the sputum is peculiar, scanty, viscid, thick, and yellow. The one has commencing catarrhal asthma; the other [illegible] dyspnœa. Trousseau regarded asthma as a diathetic neurosis. G. Sée appears to have regarded it as essentially due to a modification of blood or to a constitutional vice of nutrition of the tissues, as gout or dartre. Guéneau de Mussy believed the arthritic diathesis to be the essential cause of asthma. The seat of nervous spasm is not yet fixed. Trousseau thinks that it is laid in the Reisseissen muscles; G. Sée in the inspiratory muscles and diaphragm. There are only a few diseases that can be confounded with asthma, if we consider that it is distinguished from all dyspnœas, the organic diseases of the heart, and pulmonary tuberculosis by its characteristic signs, its periodicity, the form of its attacks, and the bronchial catarrh which accompanies it.

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[1] It is important to know that these waters bear carriage remarkably well, and lose little in the process.

Whether caused by diathesis or inflammation, asthma is sometimes cured at Mont Dore. But the variety which is most often met with there, and is treated with the greatest success, is catarrhal bronchial asthma, or humid asthma. In this form, attacks, at first separated, meet; the dyspnœa increases and becomes continuous in consequence of the viscidity of bronchial exudation. But as soon as the particles of phlegm can be ejected and air begins to penetrate into vesicles, emphysema diminishes, hæmatosis takes its course and relief arrives. As to the spasmodic dry asthma, which is hereditary and met with in all ages, it obtains there a manifest relief and sometimes a real cure.

It is well known now how many therapeutical means we have at Mont Dore, and physicians are aware of their effects. They vary according to the constitution, age, and sex of the patient. We can modify dyspnœa, bronchial exudation, and emphysema. Our waters in a variety of ways can be sedative, excitant, derivative, even substitutive, according to the mode of application and the duration of the treatment.

First, water is taken as drink; it gives an increase of action to the nutritive functions and to circulation.

Next, the inhalation of vapour, the special action of which on the respiratory organs is a well-established fact. Experience has proved that it is the most valuable remedy for bronchial spasm; that mineral vapour has an effective sedative action on smooth and elastic muscular fibres; and that it affords an instantaneous relief. Invalids stay in the vaporarium during a time varying from fifteen to sixty minutes, according to the case.[1] I think that sedative action is due in great part to vaporised arsenic and carbonic acid.

After the half-baths of the Pavilion at 111° F. they are given according to the constitution of the invalids, and produce wonderful effects. On leaving this bath, which lasts from five to twelve minutes, a feeling of comfort succeeds almost immediately to the general excitement, the body is covered with perspiration, and the breathing returns to its normal condition.

At last, the spinal douche, which has been largely used at Mont Dore, stimulates the vaso-motor nerves, re-establishes the skin functions, and produces the best results.

A sedative influence, I dare say, is one of the most evident and immediate effects of the Mont Dore treatment. It is observed with the most irritable subjects, re-establishes the disorders of innervation, influences general circulation, and chiefly the respiratory apparatus. Nervous spasm is alleviated. These results are specially observed in essential spasmodic asthma, where neurosis seems to be attacked in its own origin—that is to say, in the morbid spasmodic element.

Mont Dore waters have a local resolvent action, chiefly upon the mucous membrane of the respiratory organs, which is modified by their direct contact. This first effect upon the lungs is particularly observed in catarrhal bronchial asthma. I compare it to the effect of digitalis on the heart. All these phenomena produce a reconstituent action of the organism, shown by the development of the appetite, re-establishment of the digestion, equalisation of the circulation, return of the skin functions, and increase in strength.

If, now, there be in the action of these waters something specific, it is necessary to try to point out, amongst their numerous mineral principles, that which may be the agent. I believe that it is mainly the arseniate of soda, notwithstanding the small proportion in which it enters into the composition of the waters of Mont Dore. This was Thénard's opinion, since he says in his note to the Académie des Sciences, "One cannot doubt that it is to the presence of arsenic that one ought to attribute the powerful action of this water upon the animal economy." A most valuable remedy for asthma is found in the various preparations of arsenic. Indeed, arsenic modifies powerfully the nutrition.

To illustrate now what has been said, I relate the following two cases.

CASE 1.—Miss W——, aged about thirty, was sent to me last July at Mont Dore, from London, where she lives. No family history of asthma; her mother is gouty, father and sister healthy. Her face is pale and worn, no emaciation, but very reduced in strength; she cannot walk at all, and on arriving she had to be taken up to her bedroom by servants. In September, 1880, this lady had for the first time an attack of severe bronchitis; she passed through the winter at Pau, where she had a relapse. In the spring of 1882 severe spasmodic asthma associated with urticaria developed itself. She had once an attack of herpes. She has been troubled with fits of asthma during the last two years, and is worse in damp weather; always has some amount of dyspnœa, but the attacks come on in the evening with sense of tightness across the chest, and go off with cough and frothy expectoration. When in bed she is obliged to sit up. Many remedies appear to have been fully tried without any great benefit: iodide and bromide of potassium, arsenic, citrate of caffeine, and occasionally apomorphia, also some anti-asthmatic cigarettes whenever an attack was threatening. The fits of asthma come on in an ingravescent way at any time of day or night. On examination the chest was fully resonant under both clavicles, very feeble inspiratory murmur, with prolonged expiration over the chest; sibilant and sonorous râles are audible on both sides. The action of the heart is feeble but regular, pulse weak, tongue moist, no appetite. On July 24th she began treatment. I first advised her to drink every day half a glass of the Madeleine water, to stay a quarter of an hour in the aspiration room, and to take a foot-bath for six minutes at 4 P.M.—25th: Worse, fit of asthma next night, she could not continue the treatment the next day.—27th: Began again the same treatment; no asthma in the evening, she slept for a few hours. Continued every day increasing gradually the duration of inhalation of vapour; fit of asthma almost every night, but less severe. In a week's time the relief to all the symptoms was most remarkable. On Aug. 4th she could stay for forty minutes in the aspiration room, fits of asthma were less and less severe, expectoration easier. My patient began to eat and walk into her sitting room. On August 6th, I prescribed a spinal douche for six minutes at 94° F., no inhalation this day. A fit of asthma more severe next night.—8th: Two half glasses of water, another douche for six minutes; no asthma, she slept during four hours. I continued the douches every other day, alternating with inhalation of vapour and increasing the drinking with half a glass of water, and she had but one fit till the twenty-first day of the treatment. In this interval she got appetite, strength had returned, dyspnœa had improved; Miss W—— was able to get up by herself to her bedroom, and to walk in the park. She was allowed to rest for a fortnight, and afterwards began again another course of treatment of fifteen days. Every morning she stayed for forty-five minutes in the aspiration room, she took a half bath of six minutes at 104° F. at the Pavilion, alternated every other day with a spinal douche of five minutes. At the end of this treatment, my patient declared herself free from difficulty in the breathing, free from nocturnal fits, and cured. In fact, her strength had returned, she had gained in weight. In last February I saw her in London, looking stout and healthy. She had persevered, as I had prescribed, for some weeks with the Mont Dore waters, and she never got either cold or asthma, nor had she needed any treatment since she left Mont Dore last September.

CASE 2.—Mrs. B——, aged forty-five, living at Carlisle, came to Mont-Dore in July, 1884. Been liable to asthma for fifteen years; at times she was free for some weeks of all breath-difficulty. There is no history of gout or rheumatism in the family, nor any skin-disease. During the winter of 1883 Mrs. B——'s breath difficulty increased greatly; she went to Cannes to seek relief, but dyspnœa came on in an ingravescent way; she gradually got worse. On examination, patient has an extra-resonance of the chest; inspiration is difficult and noisy; expiration prolonged, with wheezy râles. Enlargement of liver; heart sounds weak and muffled; urine loaded with lithates; tongue moist. She complains of difficulty of breathing, cough, and copious glairy expectoration, obliging her to sit up at night. She is not able to move without suffocation. I prescribed as treatment every morning two half-glasses of the Madeleine water, thirty minutes of aspiration of vapour, a foot-bath for six minutes, and a half bath of the Pavilion at 105° F.

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[1] These various processes are described in detail in my small work on Mont Dore and its Mineral Waters, published by Wyman and Sons, Great Queen-street, [illegible].

every second day. This medication, well supported, was followed up for a week. Breathing appeared already easier, expectoration was less copious, and Mrs. B—— was able to walk a little in her bedroom. After a fortnight of the same treatment she persevered with three half-glasses and the half-bath of the Pavilion alternated with a spinal douche of six minutes. From this time oppression diminished greatly, strength returned, and Mrs. B—— felt well enough to go downstairs without help, and to be discharged. After a course of treatment of twenty-eight days she was able to walk a long time in the Park; dyspnœa had ceased; expectoration disappeared.

I think both these cases show the great importance of the aspiration of the mineral vapours, and of the use of the spinal douche in bronchial asthma.

ON A CASE OF THYROIDECTOMY.

BY THOMAS H. MORSE, F.R.C.S.,

ASSISTANT-SURGEON TO THE NORFOLK AND NORWICH EYE INFIRMARY, AND TO THE NORWICH JENNY LIND INFIRMARY FOR SICK CHILDREN.

THE subject of removal of the thyroid body having been lately under discussion, the following case which occurred in my practice may prove of interest.

The patient, a young woman aged twenty-two, six years ago first noticed a small swelling on the left side of the larynx, which gradually increased in spite of numerous remedies. From the time of its first appearance she suffered occasionally from attacks of dyspnœa. In 1881 she was in the Norfolk and Norwich Hospital, where, she says, the tumour was tapped, but no fluid came out: it was afterwards injected with iodine on several occasions. In the following year she was under the care of Mr. Hutchinson in the London Hospital. During all this time the tumour was gradually enlarging. In February, 1883, I first saw her, and from then till the date of operation it continued to enlarge, and the symptoms became more aggravated. In March, 1884, I sent her to London to consult Mr. Symonds of Guy's Hospital as to the advisability of removing the tumour; he recommended her to submit to the operation. The tumour at this time formed a considerable prominence below the chin, and extended from the level of the hyoid bone down into the chest behind the sternum; it occupied the whole of the centre and left side of the neck, displacing the various structures to either side; its surface was covered with a plexus of veins, and the omo-hyoid muscle from the left side was stretched obliquely across it. It was also partly covered by the lower attachments of both sterno-mastoid muscles, and the larynx was pushed over to the right side of the neck, so that the pomum Adami was situated close below the angle of the jaw. The left carotid artery could be felt pulsating quite superficially along the posterior border of the sterno-mastoid muscle. This displacement will be best understood if I mention that the distance between the thyroid cartilage and the left carotid artery, measured horizontally, was four inches. The upper part of the tumour was quite movable laterally, but its lower end was more tightly fixed in the upper aperture of the thorax. She could only walk slowly and had to keep stopping to get breath, as the least exertion brought on difficulty of breathing. On several occasions she suffered from attacks of dyspnœa lasting about an hour, during which time the face was livid, and she herself, as well as those around her, thought that death from suffocation was impending. Inspiration was prolonged even when sitting still. She also suffered from a constant dry laryngeal cough. The function of the œsophagus was not interfered with. Her general health was otherwise good, except that since I have known her she has been gradually getting thinner, her weight at the time of the operation being six stone and a half.

On April 4th, 1884, having made arrangements for the operation, I had the assistance of the following gentlemen: Dr. Firth, Mr. Donald Day, Dr. Doyle, and Mr. Pollard. Using the steam carbolic spray and other antiseptic precautions, an incision in the skin, five inches in length, was made from the hyoid bone to the sternum, over the most prominent part of the tumour. A plexus of veins covered the anterior surface of the tumour; these were divided one by one between two ligatures, notwithstanding which there was considerable loss of blood, and besides ligatures, six pairs of Sir Spencer Wells' artery forceps were in constant use. This part of the proceeding was somewhat tedious, as it seemed almost impossible to control the hæmorrhage. The tumour was enclosed in a more or less distinct capsule, which was not very easily separated in front, and appeared part and parcel of the tumour, doubtless owing to the iodine injections. The sides of the tumour were less firmly adherent and more easily separated with the finger. During all this time there was a general oozing of blood both from the capsule and from the surface of the tumour. Having first separated the upper end of the tumour, I was enabled by drawing it down, to tear it off from the pharynx and œsophagus, which formed the posterior boundary, the capsule being hardly distinguishable here. The lower end of the tumour extended down behind the sternum into the chest, and after its removal, the bottom of the cavity left was bounded on one side by the whole length of the innominate artery, on the other by the left common carotid artery from its origin upwards; these could be distinctly felt pulsating and apparently naked at the bottom of the wound. The left inferior thyroid artery was torn across, and severe hæmorrhage occurred from it. No distinct isthmus was seen, although from the situation of the tumour and the way in which the various structures were displaced I believe that the part removed represented the enlarged left lobe of the gland, in which case the right lobe was in all probability left *in situ*, not being abnormal in size. She had by this time lost a large quantity of blood, and was very faint. I therefore administered a subcutaneous injection of ether, after which the pulse improved. As many as twenty-four ligatures were used. The operation took an hour and a half. The parts returned easily to their natural positions; the wound was united with silver wire sutures, a drainage-tube having been inserted at the lower angle. The dressing consisted of green protective, iodoform gauze, Gamgee's absorbent tissue, a sponge compress, the whole being kept in position by a bandage. The tumour measured six inches in length, three and a half in breadth, and weighed fourteen ounces. It felt very firm, and was solid throughout except at one point, where was a small cyst containing about half an ounce of bloody serum. Mr. Symonds has kindly made a section of it for me, which shows the structure very beautifully. It consists of a stroma of fibrous tissue, containing large vesicles, lined with a single row of epithelium and containing in their interior a gelatinous so-called colloid material; some of these vesicles are larger than others. There are also to be seen a large number of small spheroidal cells of different sizes, which seem to be in a state of rapid proliferation, these, together with numerous bloodvessels, which can also be seen, would indicate a steady increase in size of the whole tumour, which corresponds with the clinical history.

The patient was much exhausted by the operation: her face and hands appeared perfectly bloodless, the pulse rapid and feeble; however, she slept at intervals during the night, and took a considerable quantity of liquid nourishment. For the first few days after the operation there was a large quantity of discharge, consisting chiefly of bloody serum. Twenty-four hours after the operation she complained of considerable pain when swallowing, and down behind the sternum, also in the back behind the shoulder-blades. At this time also the temperature rose steadily to 103°; the pulse was 120 per minute; she was extremely weak, and I began to fear suppuration in the mediastinum. During the following night an ice-bag was applied to the neighbourhood of the wound, and one of Leiter's leaden coils to the head; through this latter a stream of iced water was kept constantly running. She experienced the greatest relief from this treatment; the pain in swallowing diminished, and by the next morning the temperature had fallen to normal, and a severe throbbing pain in the head much lessened. By the third day her pain in swallowing had greatly diminished, and from this time her convalescence was uninterrupted. I never knew a patient to take such enormous quantities of liquid food, so much so that by the tenth day after the operation her diet had reached the following amount in twenty-four hours: Twelve eggs, twelve pints of milk, three pints of beef-tea, half a bottle of port wine, two ounces of brandy, three oysters, and a small tin of Brand's essence. On the twentieth day after the operation she had so far recovered that I was able to move her into the country to complete her convalescence, as she was much worried by the constant noise in the town. The upper four inches of the wound healed by primary union, but the remainder was not soundly healed until the end of seven weeks, as a deep sinus continued to discharge pus apparently from behind the trachea. By degrees the superficial veins began to appear and the colour returned to her face, and in two months from the time of operation she had gained in weight two stone, which she has maintained ever since, and is, I suppose, her normal weight when not interfered with by the presence of the tumour.

There is one very interesting point at the present time occupying the attention of surgeons, which is the probability *of the occurrence of symptoms resembling myxœdema following* the complete excision of the thyroid gland. Sir William Mac Cormac, in his address on Surgery, delivered at Belfast in 1884, has given a very complete summary of our state of knowledge up to that time on this subject.

The patient was exhibited before the East Anglian Branch of the British Medical Association in October, 1884, and also before the Norwich Medico-Chirurgical Society in March, 1885, up to which time she remained in good health, and showed no signs of any evil effect following the operation.

Norwich.

A CASE OF SO-CALLED CATHETER FEVER.

By GEO. C. MACDONALD, M.R.C.S., L.R.C.P.,
LATE RESIDENT PHYSICIAN, ROYAL EDINBURGH INFIRMARY.

THE following case is of interest insomuch as it shows that some at least of these so-called cases of catheter fever are septicæmic in origin, and therefore, to a certain extent, capable of control.

James M——, aged fifty-five, a factory hand, was admitted into the Royal Edinburgh Infirmary for hæmaturia and frequent calls to micturate. His present illness commenced as a severe pain in the left lumbar region ten weeks before admission, for which he can assign no cause. *The pain commenced on micturition, but subsided* towards the close of the act. The desire was so great that he was forced *to pass his urine, on an average,* every hour and a half. The urine was clear, there being no blood or thickness noticeable. At times he would have a severe pain shooting down into the left groin and testicle, accompanied with a distinct rigor. This condition continued for fourteen days, when the desire to micturate became so aggravated that he was forced to seek relief every half hour. Eight weeks after his first attack of pain it suddenly left him, and he now, for the first time, noticed that his urine became tinged with blood towards the last few drops, accompanied by a severe scalding pain in the penis, but there was no pain on exercise. The blood now increased in amount until the *urine became as black as* porter. *He had been under treat*ment for the last two months, but his medical man advised him to seek further advice. The family and personal history is good.

His present condition is as follows: Confined to bed, general development and muscularity fair; height, 5ft. 8½in.; weight, 10st.; temperature 98° to 99°; complains of slight sweats; skin soft and normal in colour; lungs normal for age. Genito-urinary system: Urine, dark, due to admixture of blood; reaction acid; sp. gr., 1009 to 1010; deposit of urates; amount varies from 90 to 100 ounces in the twenty-four hours; albumen present, due to the blood. The microscope reveals a great number of blood-discs and some amorphous urates; no germs or pus cells. Micturition is about *every hour, accompanied with slight* pain in the left lumbar region, where there is tenderness on pressure. The pain at times radiates to the testicle and end of penis. On rectal examination the prostate is found to be slightly enlarged. Diagnosis: Nephritic calculus probably passed into bladder.

March 8th (two days after admission): The hæmaturia is the same as when admitted. There are no casts nor any renal epithelium or organisms.—18th (twenty days after admission): The patient shows slight improvement, there being less blood. There is a little pus in the urine to-day; he complains of great pain at the end of the penis after micturition, also at the neck of the bladder; he cannot hold his urine longer than half an hour; no organisms.—19th: The patient was seen to-day by a surgeon, who thought perhaps the calculus from the kidney had been passed into the bladder; consequently he submitted the bladder to an exploration with Teevan's sound; but on attempting to withdraw the urine through the sound it was found that the plug was so fixed that *it could not be removed.* He therefore passed a red rubber catheter anointed with 1 in 20 of eucalyptus and olive oil. The patient was given immediately afterwards five grains of quinine and thirty grains of bromide of soda. No stone could be discovered.—20th: Temperature this evening went up to 99·4°; no rigor or any sensation of chilliness; pulse 60 (full); amount of urine passed sixty ounces; more pus and less blood than yesterday.—21st: This evening the temperature went up to 103·2°. The patient complains of great thirst; *amount of urine passed fifty* ounces; *pupils normal*; *no* nervous phenomena; pulse 96; micturition less frequent.—22nd: Temperature this morning 102°; at noon 102·8°; at midnight 101°. Urine examined at bedside, immediately passed into a clean vessel, shows as follows: reaction alkaline, smells fetid. By microscope a large amount of pus cells, a few red cells, and many rod-shaped bacteria. Ordered five grains of sulphate of quinine with fifteen grains of benzoate of soda, every four hours. Water removed from bladder by syphon action. Less urine has been passed to-day. Ordered fomentations over loins and bladder.—23rd: Temperature this morning 100°. Says he feels better; not so thirsty; urine not so fetid, and contains less pus. He, however, sweats profusely, but has passed a better night, being in less pain. *No action of bowels.* Ordered colocynth with hyoscyamus pill (ten grains) at bed-time.—24th: Temperature: morning 99·8°; evening 101·4°. Sweats continue. Urine still contains rod-shaped bacteria. Amount passed 100 ounces. Bowels moved three times.—25th: Temperature 97·4°, showing a marked fall; evening 99·4°. Amount of urine sixty ounces. Less pus; still fetid and contains bacteria. Sweats still present. Bowels moved once.—26th: Temperature 99°. Amount of urine 100 ounces.

April 3rd.—The state of the patient's urine is much improved as regards bacteria, which, however, are still present, the urine continuing to be alkaline in reaction. He still complains of the old pain in the left lumbar region under cataplasm liniment to loins.—4th: The old pain is *still complained of this morning. In other respects he is in statu quo.*

Remarks.—My term of office having expired, I lost sight of the patient, but I believe he left the hospital very much in the same condition as in the last report, the germs still remaining. The presence of the bacteria in the urine I believe to have been due to the employment of Teevan's sound, the interior of the instrument being probably dirty, and consequently loaded with septic germs. I think that this case plainly shows that the proper treatment of these septic bladder conditions is the drainage of the viscus by the syphon action, thus removing the major part of the bacteria, followed by large doses of quinine and benzoate of soda, in the hope of lessening the alkalinity of the urine, and with the hope of thus bringing about the death of the germs. Lastly, that fatal terminations may be looked for in such cases without probably much organic change in the kidneys, the cause of death not being uræmia, but septicæmia.

Duchess-street, W.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prœmium.

ST. THOMAS'S HOSPITAL.

COMMUNICATION BETWEEN SMALL INTESTINE AND BLADDER; TUBERCULOSIS; DEATH; NECROPSY; REMARKS.

(Under the care of Mr. CROFT.)

FISTULOUS communication between the bladder and the intestinal tract above the rectum is usually the result of malignant ulceration which has extended from the sigmoid flexure into the bladder. Tubercular ulceration rarely produces such a condition. *In this case the local signs were* very few and the absence of chest symptoms, although extensive tubercular disease of the lungs, was found post mortem, rendered exact diagnosis difficult.

For the following notes we are indebted to Mr. W. F. Ward, dresser.

John R——, aged sixty, a wine cooper, was admitted under the care of Mr. Croft on February 4th and died on February 27th, 1885. Family history: Parents both died at the age of seventy-four, cause of death unknown. The father suffered from rheumatism. Three brothers and one sister healthy. No history of phthisis or malignant disease. Until six weeks before admission, when he first felt pain on micturition, he had always been healthy. He had not had gonorrhœa and had never passed gravel. Pain was felt at the commencement of the act of micturition. The stream of urine was smaller than formerly, and he says that it sometimes stopped suddenly. A month ago the urine became thick with sediment and of a port-wine colour. Lately micturition had been very frequent, about twenty times in the night. He had lost flesh rapidly, about two stone in the six weeks.

The patient, an emaciated man, with sallow complexion and dilated capillaries in the cheeks, complained of frequent and painful micturition. The abdominal walls were lax and there was no tumour to be found, percussion eliciting a tympanitic sound all over. There was tenderness in the region of the bladder but no pain. There was a small ventral hernia. Urine, sp. gr. 1019; slightly acid. It contained no albumen; it was thick, of a brownish-yellow colour, and deposited a copious sediment. Microscopically, pus, blood-corpuscles, and vegetable fibres were seen. Tongue was dry, and he was thirsty. Pulse about 80, full and compressible. Morning temperature 98·8°; evening 102·2°.

Feb. 6th.—The patient feels well, and has no pain except when passing urine. Appetite very fair. He does not sleep well.

8th.—He complained of discomfort in the abdomen, which disappeared after the administration of an enema. He was sounded under ether, but no calculus was found.

10th.—Feeling rather better and able to retain urine for a longer time. Urine, sp. gr. 1016; very offensive in odour; other characters similar to those found on admission. The abdomen had flaccid walls. There was no distension and no tenderness on palpation. No tumour could be felt on palpation.

13th.—A mixture containing dilute sulphuric acid, tincture of opium, tincture of perchloride of iron, and infusion of calumba was ordered.

20th.—Urine passed in smaller quantity. There has been an evening rise of from one to two degrees since admission, the morning temperature being usually about 99°.

22nd.—Diarrhœa; frequent, loose, yellow, and offensive motions commenced and continued until his death on the 27th. The bowels acted from six to eight times in the twenty-four hours, there was much hiccough and loss of appetite, and very little urine was passed. During the last few days he became restless and delirious, on the day of his death the skin becoming cold and clammy. Pulse 128; temperature 99·4°. After the 20th there was no rise of temperature above 100° nor fall below 98·4°. He had emaciated greatly. During the whole of this time there had been no cough or symptoms of lung disease.

Necropsy, made on the following day by Dr. HADDEN.—On opening the abdomen the small intestines were adherent to each other by organised lymph, but were separable on slight traction. No tubercles were seen. At the points of contact there were longitudinal red streaks. There were dots and lines of pigment scattered over the peritoneum covering the small gut. On removing the viscera from the abdomen a fistulous communication was found between the ileum and the bladder, both parts being pretty firmly adherent. In the portion of ileum examined typical tubercular ulcers were found, fairly extensive near the ileo-cæcal valve. On the [illegible] there were solitary miliary tubercles. The [illegible] raised and thick, and the ulcers did not extend [illegible] beyond the mucous coat, excepting in the neighbourhood of the bladder, where some had penetrated into a cavity situated near the summit of that organ, which again communicated with the bladder by a small opening. The cavity just mentioned was formed by intestine, bladder, and surrounding semi-organised lymph. Pleuræ firm and extensively adherent on both sides. In each lung mixed broncho-pneumonic and tubercular disease, distinct miliary tubercles [illegible]. There were also old caseous nodules. Other organs fairly healthy.

Remarks.—This man was admitted under Mr. Croft's care for cystitis. A local cause for that condition was carefully sought for, but none was discovered. In the course of a few days feculent matter appeared in the urine, and the nature of the case became less obscure. As no consistent feculent material troubled the bladder or was perceptible, and as the starch and vegetable tissues when examined microscopically were not in an advanced stage of digestion, it was inferred that the small intestine had opened into the bladder. Whether this ulceration had been the result of a cancerous or tubercular new growth there was no positive evidence; indeed no tumour could be traced. Clinically and pathologically the case is one of interest, and worth recording.

DUNDEE ROYAL INFIRMARY.

MALIGNANT ENDOCARDITIS FOLLOWING A SLIGHT INJURY TO KNEE; DEATH WITHIN FOURTEEN HOURS OF ADMISSION; NECROPSY; REMARKS.

(Under the care of Dr. SINCLAIR.)

DURING the present year a great deal of attention has been given to the disease known as ulcerative endocarditis, and from time to time we have published cases in the "Mirror" (Jan. 13th and March 21st). We would refer also to the lectures by Dr. Osler published March 7th, 14th, and 21st.

For the clinical record of the following case we are indebted to Mr. W. Gibb, medical assistant; and for the notes of the post-mortem examination to Mr. A. M. Stalker, M.A., M.B., pathologist.

G. B——, aged twelve, was admitted at 5.30 on the afternoon of Jan. 10th, 1885, in a delirious and unconscious condition. No history could be obtained from anyone until after his death, which took place on the following morning, the patient never having regained consciousness. His uncle then stated that on Thursday, Jan. 8th (two days before admission), the patient came home from school complaining of pain in his left knee, caused by a fall in the playground; he took to bed and began to shiver, this was attributed to "cold." On the Saturday he became unconscious; and the case being certified as "typhoid fever," he was removed to the infirmary. On admission the temperature was 105·2°; cardiac pulse 168. Patient delirious, very noisy, arms and legs stiff, constantly changing his position, legs drawn up, and muscles hard; slight herpes on lower lips; no mark of external injury, and no typhoid spots.

Examination of chest showed dulness at left apex in front with harsh breathing. Apex beat of heart absent and no radial pulsation. Continually moaning and occasionally crying out loudly. Ordered nepenthe draught, and after three doses he became considerably quieter. At 10 P.M. the left pupil was observed to be enlarged, the right contracted; later on they were both enlarged and acting sluggishly to light. At 1.15 A.M. on Jan. 11th the temperature was 103·6°, and at 7.15 A.M. (fifteen minutes before death) it reached 104·8°. From midnight until his death the patient was comparatively quiet, expiring suddenly at 7.30 A.M.

Necropsy (Jan. 12th).—Body well nourished. The only external mark was a small scar on the left knee; on the dorsum of the right foot there was a small abscess about the size of a pea, just under the skin. On opening the thorax, the lungs were observed to be deeply congested, especially the left at the apex. The heart showed numerous luxuriant vegetations on the mitral valve, and some other slight vegetations on the aortic valve. There was freshly deposited lymph on the front of the epicardium; and at the intermuscular septum there was an abscess under the epicardium, about the size of a pea. There was about half an ounce of fluid in the pericardial cavity; some clear fresh lymph was deposited over both pleuræ, but very sparingly distributed. Abdomen: No evidence of peritonitis. Right kidney weighed four ounces and a half; numerous abscesses were seen under the capsule, about the size of a pin-head, consisting of a yellow spot in the centre, with narrow area of congestion around. About half a dozen abscesses, the size of a pea, were seen extending inwards into the cortex about half an inch. The left kidney weighed four ounces; there were numerous pin-head abscesses here, the same as in the right, but no larger ones. Spleen large and congested, with three or four forming abscesses, a quarter to half an inch in diameter. Liver normal. Brain normal to appearance. Ventricles dry.

Remarks by Dr. SINCLAIR.—Any well marked case of this grave malady is always interesting and must be specially at the present moment, when we are all fresh from the perusal of the able Gulstonian Lectures of Dr. Osler of Philadelphia. It is matter for regret that this case was little more than twelve hours under observation, and that we were absolutely without any history until after the patient's death. It so happens, however, that he was seen shortly after admission, though at different times, by my friend Dr. Stalker and myself, and that we both expressed the opinion, quite independently of each other, that we should have pronounced the case as one of pyæmic infection had any cause been ascertainable. The cause, an injury to the knee, was obtained after death. It will be observed that here, as in most cases of malignant endocarditis, as Dr. Mitchell Bruce has well put it, "the phenomena of cardiac inflammation are comparatively subordinate to those of general infection."[1] It will be noted also that the patient was of an age at which the disease is comparatively rare. There were none of the antecedent sclerotic changes in the valves which have been so frequently observed. The lesions were of the vegetative and suppurative character, and, as is usually the case, were strictly limited to the left side of the heart. It is not difficult to understand the causation of the other pathological changes in the spleen and kidneys when the systemic circulation was being continually poisoned from the endocardial foci. I hesitate to express an opinion as to the possibility, or rather perhaps as to the probable frequency, of primary protopathic endocarditis, for which Dr. Osler pleads with great plausibility, because I have been so unfortunate as to have seen very little of malignant endocarditis. But I would venture to cast my opinion, whatever it may be worth, on the side of those who think the primary affection must be very rare. If in any case I could find no sufficient cause external to the heart, I would still hesitate to class it as primary, if I discovered any chronic valvular change, for the obvious reason that this of itself would form a starting-point which might, on very slight provocation, light up an acute destructive inflammation sufficient to inaugurate secondary pyæmic changes. Year by year, primary abscess of the brain—a somewhat analogous case in some respects—is becoming more rare, and is regarded by many as hardly existing, because careful inquiry usually discovers an antecedent disease or injury of the skull, most commonly of the temporal bone. In short, both ulcerative endocarditis and abscess of the brain usually owe their existence to some external cause, and the fault is usually ours if we fail to find it. Dr. Osler has, to some extent, lent the weight of his high authority to this view in his lectures. "Many of the cases occur after very slight injuries, as having a hangnail or corn; a sloughing pile; or the passage of a sound through a stricture."[2] Such a slight cause is only too apt to be overlooked. In the case above recorded, a comparatively trifling injury to the knee was sufficient to set up an attack which proved fatal in a very few days.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

Serous Perimetritis.

A meeting of the above Society was held on Wednesday, June 3rd, Dr. J. B. Potter, F.R.C.P., President, in the chair.

The following specimens were shown:—By Dr. Gervis: Pessaries of Gelatine containing Glycerine and Boroglyceride. By Mr. Doran: A specimen showing Endometritis, Salpingitis, Oöphoritis, and Perimetritis, with Rupture of the Tube. By Mr. W. Griffith: A specimen of large Serous Perimetritis, producing complete intestinal obstruction, and evacuating itself by sloughing processes.

Dr. John Williams read a paper on Serous Perimetritis. An account of three well-marked cases was given, and a description of the appearances after death in one. Dr. Williams concluded that the disease was due to extension of inflammation from the uterus; that it commenced in the peritoneum in the neighbourhood of the ovaries, and extended along the brim of the pelvis, matting the intestines to the fundus of the uterus, and converting the pelvic cavity into a closed sac. Into this sac serum is effused, which raises the uterus upwards and forwards, and depresses the posterior wall of the vagina so as to protrude through the vulva in some cases. The effused serum becomes coagulated at the upper part, where adhesive peritonitis is present, and forms in some cases a considerable mass. This mass fixes the uterus and is the hard swelling felt after tapping.—Mr. Knowsley Thornton had seen two cases of the disease, one of which had recovered after tapping and drainage, and the other (presumed to be a similar case) had died without local treatment and without an autopsy. He urged that the connexion of the onset of these cases with delivery, abortion, and sudden checking of the menses points to escape of fluid from the Fallopian tube. The fluid, however, is not septic, as would be expected; indeed, if it becomes septic (as after tapping), the case almost always ends fatally in the absence of a free opening and washing out the cavity. The disease is practically a separate disease from ordinary pelvic peritonitis and cellulitis, with which all are familiar. The material causing serous perimetritis is evidently very irritating, as shown by the dense adhesions. He inquired whether the same solid material described by Dr. Williams was the result of irritation or of secretion under pressure. The pressure is indicated by the great pain accompanying the disease. As to treatment, aspiration is inferior to free opening by a trocar and maintenance of the opening so formed, with washing out of the cavity. Nothing answers so well for this purpose as a Cock's trocar and cannula, with a Wells' retaining spring for the cannula.—Dr. Gervis thought that cases of slight severity were not very uncommon. He differed from Dr. Williams in his explanation of the pushing of the uterus upwards and forwards, as also in hæmatocele. Dr. Williams thought this only occurred after the formation of adhesions, but Dr. Gervis had seen many cases in which this displacement occurred almost immediately after the effusion and before the fluid could have become encysted.—Mr. Doran agreed with Dr. Williams as to the usual route of the extension of the inflammation—namely, from the uterine cavity and along the tubes. In Dr. Matthews Duncan's book of "Parametritis and Perimetritis" a case is related in which the sound could be easily passed through the left tube into the peritoneal cavity. The rarity of serous perimetritis is probably due to the necessity of a combination of factors—namely, patency of the tubes, a particular sort of inflammation producing the effusion of serum, and the formation of a closed cavity by adhesions. Perimetric inflammation may be of parametric origin, by way of extension, but this is probably rarer than its origin as above described.—Dr. Graily Hewitt pointed out the analogy between effusion into Douglas's pouch (serous perimetritis) and effusion into the broad ligament (parametritis); the only difference being that of position. He thought the diagnosis of serous perimetritis from hæmatocele very difficult.—Dr. Godson believed serous perimetritis was not so rare as the author thought, and that its diagnosis from hæmatocele was often difficult. In Dr. Greenhalgh's time the ward at St. Bartholomew's had always several cases headed "Hæmatocele," and cases with the same characteristics were called by Dr. Matthews Duncan "perimetritis." As neither tapped these swellings, their pathology was so far doubtful.—Dr. Matthews Duncan esteemed highly this contribution to pathology, and especially the post-mortem in one of the cases. In Dr. Duncan's cases the fluid always ran off as in a perimetritic abscess, and he had no experience of the solid matter described by Dr. Williams. He had seen the serum set after it was drawn off, but he required full assurance as to its formation in the cavity containing the fluid.—Dr. Cleveland thought the use of the thermometer had not been sufficiently dwelt upon in the differential diagnosis between serous perimetritis and hæmatocele.—Mr. W. Griffith thought that the great difference of opinion among the speakers arose from the want of a precise definition of serous perimetritis. Some, who thought the disease rare, limited the term serous perimetritis to cases with large effusion. He believed serous perimetritis to be the commonest form of perimetritis by the analogy of pleurisy with effusion of serum and that of other inflammations of serous membranes, and by the displacement of the uterus and its rapid subsequent retreat. The specimen which he showed illustrated the occasional sudden disappearance of the signs, the serum escaping by rectum, vagina, and bladder, and not showing its presence as pus would.—Dr. Galabin had met with a fair number of cases in which encysted serous perimetritis had been diagnosed, and the diagnosis confirmed by the gradual disappearance of the swelling and the recovery of the patient. In one case, the resemblance to an ovarian cyst had been very close, a fluctuating swelling in Douglas' pouch being felt as a tumour reaching above the navel. A diagnosis of serous perimetritis was made because of the acute inflammatory symptoms with which the affection began. It eventually disappeared completely. He had only once tapped a serous perimetritis, and that in consequence of an error in diagnosis. Tapping was generally inadvisable. His case illustrated the fact that these cases may sometimes have the rigors and high temperature usually thought to indicate pus. It was aspirated, and clear serum drawn off with antiseptic precautions. The patient became worse, showing septic symptoms, the swelling filled again; a free incision was made, a large drainage-tube kept in, and the cavity washed out with a weak solution of iodine. The patient recovered after a serious illness.—Dr. CHAMPNEYS had noticed the flakes of lymph described by Dr. Williams in fluid recently drawn from a case of serous perimetritis under his care. He had lately had a case in St. George's Hospital in which a pouch of clear serum existed side by side with an ordinary pelvic abscess. As regards the surgical treatment, it must be remembered that the walls of the cyst are dense and unyielding, and would not readily collapse; in this lay one of the dangers. If such a collection were opened, antiseptic treatment should consist of careful antiseptic cleansing of the vagina and of the instruments; and in addition, he believed that it was well to leave an iodoform pessary, which would melt slowly, in the vagina, as a precaution against any germs which might attempt to gain an entrance. He believed that a differential diagnosis without tapping was impossible more often than not. He would remind Mr. Griffith that a very small enlargement of a pelvic organ—such as an ovary—is sufficient to displace the floating uterus, and that displacement was not an absolute evidence of effusion.—Dr. WILLIAMS, in reply, said that his first case was improved by tapping; that she died from severe diarrhœa, for which there was ample cause other than sepsis, and the contents of the sac were quite sweet and antiseptic after death. The little serum at the bottom of the sac was clear and sweet. As to the rarity of the disease, Dr. Williams was surprised to hear from several speakers that they had seen several such cases. There were only about half a dozen cases on record, and the majority of the systematic writers on the diseases of women said little or nothing about it. The three cases recorded in the paper were the only three that Dr. Williams had seen and recognised. Mr. Doran's ingenious explanation of the extension of inflammation along the Fallopian tube to the peritoneum in some cases and not in others was deserving of attention and study. Dr. Williams thought it probably a correct account of what took place. Dr. Matthews Duncan asked if the solid serum was the result of post-mortem change. Dr. Williams thought it was not, because the solid mass was discovered by Dr. Hewitt and himself during life above the layer of fluid in the most dependent part of the sac, flakes of it were passed in the second case; and in the three cases a similar hard mass was discovered at the top of the sac during life, and Dr. Matthews Duncan had found the same physical signs after tapping signs which the presence of the coagulated fluid fully explain.

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[1] Quain's Dictionary of Medicine, p. [illegible].

[2] Lecture II.

Mr. WALTER GRIFFITH showed a specimen of Pseudo-osteomalacic Pelvis of Naegele. It was bought in Paris by Professor Humphry of Cambridge, and lent by him. It was obviously rachitic, but had some of the characteristic deformities of mollities, including a much-curved, instead of a flat sacrum, much-curved iliac fossæ, and a triangular in place of the usual flat brim; the posterior part of the ilia was moulded round the sacrum. The pubis, however, was not beaked, as was the case in other specimens of this type. It was suggested that the cause of this unusual deformity was a severe form of rickets occurring later in childhood than usual. References were given to other recorded specimens, and to papers on the subject by Smellie, Dr. John [illegible] of Glasgow, Naegele, Michaelis, Litzmann, and [illegible]. Photographs and detailed measurements were also given.—Dr. CHAMPNEYS regretted that the author had not adopted the plan which he had himself followed when he had brought abstruse pelves before the Society—viz., that of having the specimen on view with the paper at the library for the study of Fellows. Speaking from a cursory view of the pelvis, he thought the disease appeared to have attacked the pelvis unequally, the posterior parts being much more deformed, and bearing much plainer evidences of softening, than the anterior parts. The specimen was of great interest.

ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Surgical Section, on March 20th,

Mr. WHEELER read a paper on Complete Excision of the Clavicle for Osteo-sarcoma, and on Partial Excision of the Clavicle for Necrosis. Both patients recovered, and he had seen the first nine years after the operation; he was in good health, and had admirable use of his arm.—The PRESIDENT suggested that the paper should have been entitled "Excision of Diseased Clavicle," instead of "Excision of the Clavicle." Excision of the healthy clavicle was of easy performance; but that of a diseased clavicle was an operation of great difficulty, according to the disease affecting it. The power preserved in the upper extremity was wonderful, as though the patient had some power of supplementing the want of the bone.—Mr. TUFNELL, having had the opportunity of witnessing both operations, called attention to the advantage of previous examination of the chest and kidneys. In the case of the man on whom Mr. Wheeler had operated, both were found sound, and but for the examination the operation would not have been performed.—Mr. WHEELER, in reply, said the reason he did not actually entitle his paper "Excision of Diseased Clavicle" was that at the outset he stated it to be a case of osteo-sarcoma.

Mr. WHEELER also read a paper on Excision of the Shoulder.—Mr. THORNLEY STOKER recognised the result of Mr. Wheeler's skill in the example exhibited to be almost beyond criticism. But he challenged Mr. Wheeler's statement that it was necessary to fall back upon military statistics for a knowledge of the success attained in dealing with gunshot injuries. There was no parallel in the conditions of operating for gunshot injuries in the field and operating in civil practice for disease, the circumstances and surroundings being entirely different, and also the fact of the well-known mortality attending operations in the field.—Mr. BARTON concurred with the author that the operation of excision of the shoulder was rare, but in the reasons for it the most important one was omitted—namely, that the shoulder-joint was subsidiary to the movements of the scapula on the ribs. The condition of an ankylosed shoulder was very different from that of an ankylosed elbow, which rendered the upper extremity useless, and therefore a recognised operation which every surgeon would perform. But an ankylosed shoulder-joint was by no means useless. The supplemental movement of the scapula on the ribs gave such a wide range of motion that it became unnecessary to operate. For his own part, instead of a straight incision through the deltoid muscle he preferred a **U**-shaped incision posteriorly, about the middle of the scapula, and taking in the posterior edge of the deltoid, as giving ready access to the joint, and natural drainage. He was not obliged to do more than scrape off the diseased cartilage from the glenoid cavity. Mr. WHEELER, in reply, said Mr. Stoker had missed his remark that for comprehensive statistics they had to go to military surgery, because in civil practice the operation was comparatively rare. As to the well-known mortality in the field, the statement was open to exception, because in Larrey's cases all the first succeeded, whereas in the Schleswig-Holstein campaign there appeared to have been great mortality following amputations of the shoulders and legs; and, again, in the next serious battle cases of excision of the shoulder did very well. It was therefore unaccountable why there was great mortality consequent on operations on some fields of battle and very little on others.

Mr. SWAN read a paper on Condylotomy by the Osteotome for the Treatment of Knock-knee. He had practised Mr. Reeves' operation exclusively, but he had found it futile to avoid entering the joint. During the past four years he had operated on sixty-eight individuals, and [illegible] knees in all were operated upon. The ages ranged from nineteen to three years and a half. Nineteen had both knees operated on simultaneously. Suppuration occurred only twice, and all the cases recovered with useful limbs. Mr [illegible] had witnessed a good many of the operations, and considered the Section indebted to Mr. Swan for his [illegible] and its successful character. Like the peritoneum, the [illegible] of the knee-joint had during his time undergone a revolution. The simplicity of the operation, as done by Mr. Swan, was marvellous, and the results had been most satisfactory. It was a source of pride that Dublin was not behindhand in the great advance made by orthopædic surgery within the past few years.—Mr. Thomson congratulated Mr. Swan on his valuable contribution to orthopædic surgery. Having seen several of the cases, he could testify to the skill with which the operation had been done, and to its apparent simplicity.—Dr. R. M'Donnell also congratulated Mr. Swan, many of whose cases he, too, had seen. The results were amazing, and such as a few years ago none could have believed. He had himself learned a severe lesson, having lost a patient from the simple operation of aspirating, though it was done with the greatest care, and with an instrument which had never been used before. The result of that case, which he published as a warning to others, made him timid in meddling with knee-joints.—Mr. Barton concurred as to the value of the communication in proving that the surgery of the deformity in question was on a basis of security. But it would be a mistake to conclude that, because Mr. Swan was able to bring forward so many cases with such a happy result, therefore Reeves' method was *par excellence* the best. He regarded Macewen's as superior to it, although he had not tried Reeves'. The results of Macewen's operation in fourteen or fifteen cases in which he had operated were exceedingly successful, as showing that it was free from danger, that recovery was rapid, and the condition of the limbs thoroughly satisfactory. Therefore, supposing Mr. Swan's sixty-eight cases to have resulted in perfectly straight limbs, if Macewen's method could turn out limbs quite as good it ought to be preferred, since the joint was not opened. Indeed, with proper precautions Macewen's operation might be performed on both knees at the same time without risk of rise in temperature, or of suppuration.—Mr. Wheeler considered it impossible to perform Reeves' operation without opening the joint.—The President pointed out that the operation performed by Dr. R. M'Donnell was for a joint already diseased, whereas Mr. Swan's operations were all in the case of healthy joints.—Mr. Swan replied. Without expressing an opinion in favour of either operation, he was disposed to think that the freedom of the incision, the patulous condition of the osseous opening, and the easy escape of fluid, conduced to the immunity from risk. He used the spray as a concession to prejudice, but he had not used it in the last twenty or thirty cases. At the same time, he followed antiseptic surgery, and always dressed a case under the spray, thereby feeling confidence, and the method being useful in moistening the dressings.

Reviews and Notices of Books.

A Text-book of Pharmacology, Therapeutics, and Materia Medica. By T. Lauder Brunton, M.D., D.Sc., F.R.S., Lecturer on Materia Medica at St. Bartholomew's Hospital, &c. &c. Adapted to the United States Pharmacopœia by Francis H. Williams, M.D. Boston. London: Macmillan and Co. 1885.

In a recent article in The Lancet we pointed out that to the term pharmacology is no longer assigned the old significance which it bore as a synonym of materia medica. It is the science of the action of remedies, and deals with the modifications produced in healthy conditions by the operation of substances capable of producing modifications. It is essentially a branch of physiology, and is equivalent to the phrase "the physiological action of drugs." It constitutes, as has been very justly remarked, the chief basis for the application of remedies in disease, and is the connecting link between materia medica on the one hand and the art of medicine on the other. That it has hitherto been but imperfectly taught in our medical schools is generally admitted, and the explanation usually given is that it is impossible to teach it well because there is no trustworthy text-book on the subject in the English language. The appearance of Dr. Lauder Brunton's comprehensive work will save us from this reproach in the future. That its publication has been so long delayed is a subject for regret, but it is so complete, even to the minutest detail, that we cannot help feeling that we have not waited in vain.

The work opens with a chapter on the relations between the organism and substances by which it is affected, a subject which is dealt with in a manner possible only to one who is both a chemist and a physiologist. The second chapter, treating of circumstances affecting the action of drugs on the organism, is a masterly essay deserving careful study and consideration. From the outset it is seen that the work has little in common with the old-fashioned books on materia medica. It is not a mere collection of dry facts and technical details, but a scientific treatise worthy to be ranked with the highest productions in physiology, either in our own or any other language. The information is conveyed in a form in which it will be readily assimilated even by a first year's student. The author commences with the simplest facts, and gradually step by step leads up to the latest development of science. Everything is practical, the dry, hard facts of physiology being pressed into service, and applied to the treatment of the commonest complaints. It is a book of study for the scientist, and a work of reference for the practical physician. The information is so systematically arranged that it is available for immediate use. The index, which is divided into three parts, occupies considerably over a hundred pages, and is so carefully compiled that a reference to any special point is at once obtainable. The arrangement of the type is novel, and enables the reader to see almost at a glance in what cases, or under what circumstances; the use of any particular remedy is indicated. Dr. Brunton is never satisfied with vague generalities, but gives clear and precise directions for prescribing the various drugs and preparations which he recommends. Much of the work is the result of his own observation and mature experience; but where he has had to rely on the statements of others, he has been most careful to assign to them their full share of credit. The references to foreign literature are wonderfully complete, and will be of great assistance to original workers. There can be no doubt that the publication of this text-book will have an important influence in improving the status of pharmacology in this country. That materia medica as an educational agent is a thing of the past is certain, and it is equally certain that its place will be taken by a systematic study of pharmacology. The whole subject has of late years been undergoing a gradual but slowly progressive change. We congratulate Dr. Lauder Brunton on the appearance of his masterly work, which will ever remain a monument to his genius and industry, and we congratulate students on being at last placed in possession of a scientific treatise on a subject of enormous practical importance.

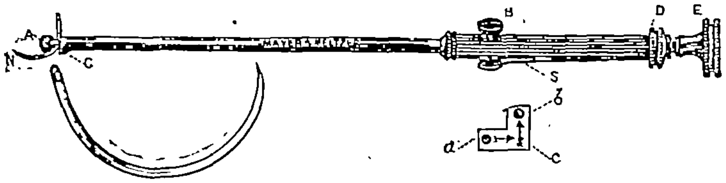
Elementary Text-book of Zoology: Special Part, Mollusca to Man. By Dr. C. Claus, Professor of Zoology in Vienna and Director of the Zoological Station at Trieste. Translated and Edited by Adam Sedgwick, M.A., and F. G. Heathcote, B.A. With 706 Woodcuts. London: W. Swan Sonnenschein and Co. 1885.

The second volume of Mr. Sedgwick's translation of Claus' Elementary Text-book of Zoology has appeared very speedily after the first. It includes the Mollusca, Molluscoidea, the Tunicata, and Vertebrata. Though essentially a treatise on Zoology, the present work differs in an important respect from the older books on the same subject in giving not only the differential characters of the various families with their distribution, but a good, though short, account of their internal organisation. Thus, to give one example: in the Cephalopoda, which are defined as Molluscs, with well-defined head, "a circle of arms bearing suckers round the mouth, and funnel-shaped, perforated foot, diœcious," the chief forms are lightly sketched, and a description given of the funnel, the chromatophores, the cartilaginous skeleton, alimentary canal, nervous system, sense organs, respiratory and circulatory systems, the sexual glands, and finally of the development of the group. This section alone is illustrated by sixteen well-executed woodcuts. In the account of the other groups also illustrations abound of typical examples. With this work, a good museum at hand, and a set of dissecting instruments, the student might obtain a very fair and full knowledge of the animal kingdom, such knowledge as would prove serviceable to every medical student, and would give him such general information as would render the study of human anatomy extremely interesting. We must congratulate Mr. Sedgwick on having executed an excellent translation of a very useful book, and Messrs. Sonnenschein on the admirable manner in which it is got up, the type, and especially the woodcuts, being extremely clear and good.

New Inventions.

A NEW NEEDLEHOLDER FOR VAGINAL OPERATIONS.

THE needleholder shown in the accompanying sketch, though not apparently much like Hagedorn's, is really a modification of that valuable instrument. It was designed for using with Hagedorn's needles, and with the view of obviating certain inconveniences which had been noticed in using his holder. These defects were remarked upon some time back by Mr. J. W. Hulke, when, in the course of an operation for a vesico-vaginal fistula, in which it was necessary to reach the posterior fornix, he used Hagedorn's holder for putting in the sutures. The two principal objections which he raised to that instrument were the following:



A and C are copper-faced pieces, between which the neeedle is grasped, A being pressed against C by a clamping screw (inside the shaft of the instrument) worked by the large milled head, E. D is another milled head fixed on the handle for the purpose of giving a firm grip when clamping a needle in with E. D is the pressure knob (there are two of them) for releasing the needle. It works in a rectangular slot in the handle shown on a larger scale below in the diagram. When the instrument is ready for use, with a needle clamped into it, D is in the position *b*. To release the needle, B is moved by the thumb from *b* to *c*, and it is then shot from *c* to *a* by a spiral spring inside the handle. To replace the needle for another stitch, E is slackened half a revolution, and then pulled on. By this means B is moved from *a* to *c*, and then shot from *c* to *b* by the small spring, *s*, when the needle can be replaced between A and C, and clamped there by means of the milled head, E. N is a needle clamped in the instrument, and ready for use.

(*a*) The forceps handles of Hagedorn's instrument make the hand occupy so much space that it cuts off the view into the vagina, and cause inconvenience in other ways where the space is so limited as it is about the vulva. (*b*) When a considerable thickness of uterine tissue has to be included in a suture, the needle sometimes slips, the grip of this holder upon the needle being scarcely firm enough to hold against such resistance as is then encountered. In addition to these defects it was found that when Hagedorn's holder is held in some positions, it is difficult to get at the releasing apparatus without changing the position of the grip of the hand upon the instrument to a considerable extent, and in so doing running the risk of displacing the needle from the tissues into which it has penetrated. The instrument which is here shown meets these objections in the following manner. Regarding (*a*), the difficulty is overcome by doing away with the forceps-like form of the instrument, and by having instead a round handle about three-quarters of an inch thick. Regarding (*b*), the grip of the instrument upon the needle can be almost indefinitely increased, as the needle is grasped by means of a clamping screw. This screw is cut with a very fine thread, and being worked with a large milled head, can be made to take an exceeding firm hold. To obviate the remaining defect, in the new instrument the needle is released by a trigger-like action, the release being effected by pressing against a button with the thumb. There are two of these buttons on this instrument, and they are so placed that in whatever position the instrument might happen to be grasped, one of them would be presenting to the tip of the operator's thumb. The instrument has been made by Messrs. Meyer and Meltzer of Great Portland-street, and I am much indebted to them for the skill with which they have carried out my designs. The instrument has been used by Mr. Hulke for a case which presented about as much difficulty in reaching the fistula and putting in the sutures as would be likely ever to occur. He said after the operation that the instrument was the most efficient he had ever yet used for the purpose.

Appended hereto is a sketch of the instrument, and a short description of its working parts and the method of using it.

ARTHUR E. NEVINS,
Middlesex Hospital. One of Mr. Hulke's late Dressers.

PATENT POSTAGE STAMP AFFIXER.

WE have had submitted to our notice a machine for affixing postage stamps which has been invented and patented by Mdlle. Victoria De Bunsen. By its use the injurious habit of wetting with the tongue the stamps and flap of the envelope is obviated, and as it is stated that 100 stamps can be affixed in five minutes by an experienced person with this machine, it is apparent that by its use a vast waste of time will be avoided by those who are in the habit of using stamps in any considerable number. Not the least merit of the apparatus is its simplicity and the absence of complicated movements in its employment. It is exhibited in the International Inventions Exhibition, where it may be inspected by those interested in such an appliance.

HOLLOW EYE SPECULUM.

To the Editor of THE LANCET.

SIR,—In a description of a hollow eye speculum (THE LANCET, June 20th, p. 1130) Mr. E. Treacher Collins does me the kindness to refer to my lid-irrigator described by me at the meeting of the British Medical Association at Belfast last year. As an illustration of parallelism in ideas, allow me to say that the first idea of my contrivance was a douche passed through the two limbs of a speculum. But a modification was made into the present lid-irrigator because (1) in severe cases, where there is much intumescence of the lids, the irrigator can be easily introduced where a speculum is difficult of application; (2) the stream can, with the irrigator, be readily directed to the angles of the conjunctival cul-de-sac; and (3) during the whole of the manipulations the upper lid can be held away from the cornea. The whole object aimed at is a lengthened and complete application to the upper cul-de-sac. There is no difficulty in treating the lower lid; the lower limb of the douche was found to be superfluous and to interfere with the movements of the upper jet. As a practical man, I should advise nobody to trust any instrument to the patient. If you wish cases of gonorrheal ophthalmia to be saved, see them yourself, and see them often. Mr. Collins, in modifying my instrument, has gone back to an earlier stage of its evolution, and I am constrained to say that I think my own simplified form is the better instrument for practical work.

I am, Sir, yours, &c.,

EDGAR A. BROWNE,
Senior Surgeon, Liverpool Eye and Ear Infirmary.
Liverpool, June, 1885.

THE LANCET.

LONDON: SATURDAY, JUNE 27, 1885.

Though personal, social, and scholastic prejudices and predilections may never be entirely eliminated from the election of members of the Council of the Royal College of Surgeons, it is certain that they have not now the preponderance they once had. The political education of the electors is advancing—slowly, it is true, but surely; and the time cannot be far distant when the elections will be determined rather by political considerations than by personal sentiment or caprice. It will soon, we trust, cease to be regarded as a qualification for a seat in the Council that a candidate belongs to this or that hospital and medical school. The Council should represent the interests of the surgical profession, and especially those interests which more particularly affect the status and professional well-being of the Fellows and Members of the College. The only influence that the so-called representation of the schools ought to have upon the result of any election should be to prevent any school from being over-represented. The representation of particular schools has indeed been a glaring defect in most of the College elections; for although the Charter does not explicitly suggest such representation, it does so implicitly by requiring exclusive personal voting. By this provision the election of members of Council has been thrown into the hands of those Fellows who reside in or near London, and who are therefore more liable to be affected by the influence of the schools than those who reside in the provinces. When Fellows are allowed to vote either in person or by papers, it may be expected that not only will the constituency be enlarged, but its independence and intelligence will be proportionately increased. Meanwhile the election must take place on the old register, and to some extent on the old lines.

The questions before the electors are extremely simple. The Council is full of anomalies and abuses. Not only does the Council elect the examiners, but every member of the Council is himself eligible to be elected as an examiner. Until a few months ago every member of the Court of Examiners and one member of the Board of Examiners were also members of the Council; or, in other words, eleven of the twenty-four members of the executive annually appropriated an aggregate of £5000 from the revenues of the College. Again, the office of President has hitherto been conferred on the senior member of the Council in rotation, whatever his degree of fitness or unfitness. And lastly, the Council has always exercised the privilege, and still deliberately claims the right, to make whatever alterations it pleases in the constitution and relations of the College, without consulting the opinions or wishes of the Fellows and Members whom it nominally represents. Endeavours have been made to remedy these evils, but a majority of the members of the Council has repeatedly resisted every attempt, whether originating from within or without the Council. Of the candidates for election next Thursday, Mr. Savory, the retiring member of the Council, is known to have sided with the opponents to change; while two—namely, Messrs. F. Mason and Rouse—have not as yet publicly expressed an opinion for or against. On the other hand, Messrs. Gant, Cowell, Macnamara, and Pemberton have identified themselves with the policy of a thorough and comprehensive reform of the Council.

Whatever be the result of the election next Thursday, it is to be hoped that those who do vote will not stultify themselves by resorting to the absurd system of plumping. Three members of the Council are to be elected, and those who have not the courage or capacity to give *three* votes, should at least preserve the semblance of intelligence so far as to abstain from voting at all.

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The curiosity which has so long prevailed as to the line of reform in the constitution of the University of London to be submitted to Lord Justice Fry's Special Committee by its sub-committee will be satisfied this afternoon (Friday). The draft scheme recommends changes sufficiently radical to satisfy the most advanced reformer, and, if adopted by the Special Committee, will demand the gravest consideration by Convocation and the Senate. The scheme is so thorough and so practical that we can hardly believe it can be rejected by either of those bodies. By it the entire constitution of the University will be remodelled. Instead of being composed of two bodies only—viz., Convocation and the Senate—it is proposed that it shall consist of constituent Colleges, Faculties, and Boards of Studies in addition, and that the mode of election to the Senate and the period of senatorship be completely altered. The Senate will consist of thirty members, with a Chancellor, Vice-Chancellor, and the Chairman of Convocation, as at present; but the Crown nominees and the direct representatives of Convocation will be limited to six each, whilst each of the four Faculties of Arts, Science, Laws, and Medicine are to elect three, and the constituent Colleges six. The constituent Colleges named are—University College, King's College, the Royal Colleges of Physicians and Surgeons, the Council of Legal Education, and the Incorporated Law Society. Moreover, whilst the collegiate representatives may serve for three years, one-third of each of the other groups are to retire yearly, so that in this way an infusion of new blood may be steadily secured. The advantages of such a Senate over the present fixed body are self-evident, and must commend the scheme to all well-wishers of the University. Lest the existing members should consider the proposed change an infringement of their special privileges, the Faculty and College members are to be added to the present Senate, and no new members are to be appointed by the Crown or by Convocation until their representatives respectively fall below six. This is a very judicious method for securing the needed changes with the least disturbance of the existing arrangements. Convocation remains unchanged. The constituent Colleges are to be named partly by a joint committee of the Senate and Convocation and partly by the Senate, with the concurrence of the Faculty or Faculties interested. In this way it is hoped that a closer bond may be introduced between the Colleges and the University. The most important alterations, however, will be in the formation of Faculties and Boards of Studies in each Faculty. The Faculty will give instruction to the Board of Studies, and this will in turn advise the Senate on all examinations and changes in regulations, and without such advice the Senate is not to act. As the Board of Studies will be composed almost entirely of teachers and examiners, the Senate will have a skilled body to appeal to for advice in any difficulty. At present an attempt is made to please everybody—teacher, student, and examiner—and of course neither is satisfied. Lord Justice Fry must be congratulated on the thorough manner in which he has gone to the root of the difficulty, and on the practical scheme he has devised for its solution.

UNTIL recently the treatment of palmar ganglion had been a reproach to surgery. The nature of the affection has been understood, and its ill effects upon the function of the hand have been well recognised, but in most cases only slight and unavailing measures for its relief have been taken, because the more radical modes of treatment have been fraught with much danger to life and limb. Treatment by pressure, by the application of counter-irritants, or even by tapping, has been almost universally unsuccessful, and injection of irritant solutions and incision of the synovial sac have been followed by failure, adhesion of the tendons, or even by death. Injection has failed probably from the presence of the "melon-seed bodies" so often found in these cysts. Whenever suppuration has been excited in the tumours, there has been great danger of blood poisoning in some form, and if this danger have been escaped, the tendons projecting into the sac have been firmly fixed as the cavity filled up, and a more or less useless hand has been the result. Our modern improved treatment of wounds has enabled surgeons to grapple successfully with these difficulties, and it is now possible to lay down definite rules for the treatment of palmar ganglion, and of similar synovial cysts in other situations. The first point of importance is to attempt the cure of the cases as early as possible. No good can come of delay, which merely leads to greater distension of the cyst, and is especially to be deprecated as endangering the adjacent tendons, which become stretched and even in some cases severed, by the pressure to which they are subjected. As soon, then, as the disease is clearly recognised, treatment should be undertaken. The second point is that any treatment to be successful must consist in the free evacuation of the cyst and the removal of all the "melon-seed bodies" it contains, whether these be free in its interior or adherent to its walls. For this purpose an incision about an inch and a half long, not a puncture, should be made in the most prominent part of the swelling, above the annular ligament, avoiding, of course, the radial vessels and the tendons, which can be felt through the skin. Pressure should be made in the palm to force out the fluid and as many of the loose bodies as will thus escape. Then a sharp spoon should be introduced, and the whole cavity scraped, to detach any "bodies" which may be still fixed to the synovial membrane. The "spoon" is much the best means of doing this. Some have trusted to injecting a full stream of fluid into the cyst, but this will not remove "bodies" which are still firmly adherent to the cyst wall. Volkmann passes a large drainage-tube through the cyst, and draws it sharply to and fro, and trusts to that to detach any adherent "bodies"; this is, however, an uncertain method, and if the cyst be old and large, with pouches extending from the main cavity, they escape the friction of the tube altogether. Having thus carefully removed all the contents of the cyst, whether solid or fluid, a solution of chloride of zinc, forty grains to the ounce, should be applied to the whole interior of the sac, the purpose of this being so to modify the nutrition of its lining as to prevent any recurrence of the dropsy. A solution of iodine has been used for the same purpose, and some surgeons may be inclined to use iodoform instead. The most important steps in the treatment are those to be taken to secure healing of the wound without suppuration—at any rate, without septic suppuration. As a preparatory step the parts must be thoroughly cleansed before the incision is made, and the operation should be conducted under an antiseptic spray or irrigation, and some efficient antiseptic dressing should be finally applied. Guérin's cotton-wool dressing has been used with success, so has iodoform wool; and, of course, the Listerian carbolic gauze dressing. A drainage-tube should be introduced into the wound and passed down beneath the anterior annular ligament, and only removed when the discharge through it is reduced to a minimum. The question of drainage has been much discussed. Some surgeons have contended that a second opening should be made into the cyst in the hand, and a tube be laid quite through from one end to the other, or two tubes used, one in each wound. Others have advocated several smaller incisions, or even one incision extending along the whole length of the ganglion. All these seem to be unnecessary, and Dr. Weiss has recently published in the *Revue de Chirurgie* two cases illustrating this fact, and in his excellent remarks appended to them he has argued out this point. He shows that if pressure be carefully applied over the palmar part of the cyst, all retention of fluid can be entirely obviated. The hand should be kept fixed on some kind of splint applied to the extensor aspect, until the wound inflicted is healed. As soon as that is accomplished, the fingers should be liberated and the patient be encouraged to move them. The results of this treatment are totally different from those formerly met with. When the antiseptic precautions are successfully carried ont, there is no danger whatever of blood poisoning or of profuse local suppuration, and the final result is the restoration of a thoroughly useful hand. The tendons are not bound down by cicatricial bands, and after a time it may be impossible to find any trace of the previous mischief beyond a linear scar in the forearm. In this way, therefore, surgery is now able to offer to these patients a thorough cure of their malady, and without serious risk, while formerly the cure was imperfect, and was attended with considerable danger.

An interesting question still awaits an answer. How is the cure of the synovial cyst accomplished? Is it by granulation, or direct adhesion of its surfaces? If so, why are there no adhesions to bind down the tendons and impede the free use of the fingers? Is the process of cure analogous to that obtained in a hydrocele by injection, or in dropsy of a joint treated by injection of iodine? This is the view held by Weiss and others. If so, it remains to be shown why the cases do not relapse, as so often occurs in hydrocele. At present no case of recurrence of the ganglion after aseptic incision and drainage has been reported. Until post-mortem observations are available in cases which have been cured by this operation, it will be impossible to speak with any assurance upon this point. Meanwhile the success to be obtained, if only care be taken to observe all the necessary conditions, is so great that this operation may be practised with confidence, even although we may have to wait before knowing the exact pathological changes that take place.

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If there should be present to the consciousness of any one of our readers a sense of longing for greater intellectual activity than the calls of professional duty necessitate, we would commend to his consideration the study of the "Revised Instructions to Her Majesty's Inspectors of Schools." For ourselves, we must confess to being mentally prostrated by the endeavour to read the riddle of this mysterious paper aright. The general impression left on our mind is that Her Majesty's inspectors of schools must be a class of raging lunatics if only one-half of the "instructions" issued for their guidance are requisite. For example, they are expressly cautioned against trying to do two things at once, such as giving out dictation or sums while hearing the reading of another class. They are not to show their temper, &c. &c. In short, the suspicion of their mental soundness is irresistibly suggested by the remarkable general resemblance which these "Instructions" bear to those which the medical officers of well-conducted lunatic asylums are wont to issue for the benefit of patients discharged on probation or let out on leave. Nothing more calculated to make the public conscience uneasy as to the mind-misery inflicted on young children by the way in which the Education Act is carried out than these "instructions" can well be conceived. In one, and so far as we can see only one, respect have matters been mended by the recent agitation with regard to over-pressure. The responsibility will henceforth rest with school managers and teachers of the undue taxing of the powers of weakly children. The inspector is, however, still let loose on the school, in this respect in a manner his implied state of mind scarcely justifies, for he may insist on seeing the children who may be kept back because they are deemed "of feeble or slow intellect," and unless he—the man whom it is necessary to warn against himself trying to do two things at once, and being hurried and showing undue haste—is satisfied, the precaution of managers and teachers is to go for nothing. Surely this is a very perilous state of matters. It is not asking too much to demand that a *medical* examination should be made, and that the certificate of a qualified practitioner should suffice to reduce the inspector to order. No educational system can ever, we are convinced, be safely worked until it comes to be recognised that not the glorified pedagogue who now figures as "inspector," but a medical practitioner, is made the judge of physico-mental fitness to undergo, and survive, the brain-torturing process which the most enlightened Legislature of modern times has mistaken for education. We are so thankful for small mercies that it would be absolutely unjust to acknowledge that the poor little half-starved gutter child, whose knowledge of the science of music has hitherto been derived from an outside study of the peripatetic hurdy-gurdy, and whose acquaintance with the quality of musical time has been picked up while dancing with bare feet to the music ministered by the itinerant organ-grinder, is to be henceforth graciously excused from "naming the value of the notes rhythmically and in time without *singing them*." It will now suffice to sing them. If any father of a family desires to form a just estimate of the magnitude of the task remitted, let him call upon one of his own highly educated children, upon whose culture much money and time have been bestowed, and who is *supposed* to have "a taste for music," and ask Master or Miss Hopeful to give him a specimen of the exercise from which the poor little waif is at length excused.

Annotations.

"Ne quid nimis."

WELLINGTON COLLEGE AND RUGBY SPEECH DAYS.

The annual gala day at Wellington College and at Rugby took place on Friday and Saturday of the past week. As is usual, the head-master of each school, Dr. Jex Blake of Rugby and Mr. Wickham of Wellington, made their respective addresses to the parents of their pupils, who on such occasions assemble in considerable numbers to witness the distribution of prizes and listen to the speeches of the boys and yearly statement of the head-master. These are not without interest to members of the medical profession. The two accounts are in curious contrast with each other. While at Rugby the head-master could congratulate the boys on their achievements both at the Universities and in the cricket field, the head-master of Wellington made apology for the paucity of honours gained by the boys at his school, small enough in the past compared with some other public schools, but smaller still in the present year. One advantage Wellington appears to offer is being able to send pupils straight to Woolwich without the intervention and aid of the system of private cramming, which of late years has grown so prevalent an adjunct to public school education. In this respect it competes with Cheltenham College. These two schools draw their students from very much the same spheres, possibly Wellington somewhat more from the *élite* of society and the army; but these should not be either intellectually or physically below the standard of the other school. What is it then which gives to Rugby the pre-eminence? The scholarship of the staff of masters is very much on a par at both schools. Boys destined largely for the army, as those at Wellington are, should not be inferior to those intended for civil callings in life either in intellectual culture or prowess in games. They should be in association with boys capable of successful competition at the universities to catch their spirit of culture if they cannot equal them. Yet, on the showing of the two head-masters, there appears to be a wide difference in this respect at the two schools. Wellington boys are behind Rugby boys in competition at the universities. Has the difference in locality anything to do with this? Rugby is situated on a high table-land where the wind blows with an invigorating force and braces to the fullest energy, while Wellington College is on a low-lying plain with adjacent hills which drain into the marshes below, rendering the air damp and enervating. In this country, and probably elsewhere, those who dwell on higher lands are less liable to disease than the dwellers on plains, especially marshy plains, and anything that predisposes to disease enervates the system and lessens the capacity for mental and physical energy. While the head-master of

Rugby could congratulate his school on having a system which enabled them to stamp out infectious illness, the head-master of Wellington had to acknowledge, in terms of affectionate remembrance, the sad death of the late bursar of the College, who succumbed to an attack of septicæmia in November last, making one of a series of deaths from this disease which had been fatal to several of the pupils in previous years. The head master of Wellington referred also to the early death of one of the former pupils of the College just as he had secured admission to the Engineers. It would be interesting to learn the proportion of deaths at all our public schools, among the pupils actually there and within ten years of leaving, to enable the primary cause of death in early manhood to be traced back, and we have good reason to believe this could often be referred to school life, little as parents suspect it.

CONVEYANCE OF SCARLET FEVER BY A THIRD PERSON.

THE *Medical Record* of New York contains the report of instances of this sort. It would be very remarkable if anything but communication of the disease had occurred. A lady stayed with her sister, who had five children ill with scarlet fever. She went home, twenty miles distant, and a daughter and a niece took the disease in five days. The niece died. There had been no scarlet fever in the neighbourhood for months. In the other cases doctors, of whom wiser things might have been expected, were at fault. One was the doctor in the above fatal case. He took the dying child in his arms, where she actually did die. In four days his boy took the disease, and in another four days a second boy. We should not omit to say that he allowed the first boy to climb into his lap and remain there an hour after returning from the final scene and service above referred to. Since this experience the medical man has always worn rubber clothing in the sick room of a scarlet fever patient. In another case the medical man held a little scarlet fever patient on his knee while he made an application to the throat. On his return home his son climbed up into his lap before he had time to remove his overcoat. Soon afterwards he took the disease, and other children followed. Surely, there is nothing astonishing in such facts but the utter obviousness of them. If the transmission of the disease had been intended, the devices could not have been more perfect. In this country many adopt the precautions of a long surplice for the sick room and washing of the hands, which are quite effective.

SCHEME FOR A MEDICAL SCHOOL IN DUNDEE.

EVER since University College, Dundee, was fairly equipped for its work, the hope has often been expressed in many quarters that a medical school would in time be attached to it; and since the appointment of Mr. D'Arcy Thompson, a distinguished graduate of Cambridge, to the chair of Biology last winter, the hope has taken more definite form. Mr. Thompson has already done excellent teaching and original work in Dundee on the lines adopted by the Cambridge school which recognises Dr. Michael Foster and the late Prof. F. M. Balfour as its two chief apostles. The professorial staff in Dundee are convinced that a medical school would give to the college more definite aims than it can aspire to at present. A town of the size of Dundee, with its 150,000 inhabitants and its splendidly-equipped infirmary, would in Germany hardly remain long without a medical school. The infirmary has 250 beds, an average of 150 in-patients, and a large out-patient department. The clinical material is ample and varied, and is drawn not only from the town and neighbourhood, but also from the shipping, which often supplies examples of tropical diseases. Several of the local medical men are very favourable to the scheme, and Sir Andrew Clark, Professor Gairdner of Glasgow, Professor Foster, Dr. Macalister of Cambridge, and many others have expressed their hearty approval of the enterprise. Professor Gairdner has gone so far as to consent to distribute the prizes and certificates, and to deliver an address on "Medical Teaching" at the closing ceremony of the college on Saturday, the 27th inst. Considering the crowded condition of the class-rooms and wards in Edinburgh and Glasgow, it is surely possible to attract students in sufficient number to make a respectable start, if only the money be forthcoming and the staff be carefully and wisely selected. The Universities (Scotland) Bill, 1885, contains a clause allowing St. Andrews University to affiliate colleges in other towns; and if Dundee can only show a good reason for the existence of its medical school, and good, honest work, the Executive Commission which will be appointed under the Act will hardly be able to pass over its claims to recognition. It may interest our readers to know that this is not the first time the scheme has been broached, and that it, or something like it, was suggested in the columns of the *Dundee Advertiser* by a retired Edinburgh surgeon, the late Dr. Watson-Wemyss, of Denbrae, St. Andrews, as long ago as 1872.

ANOTHER KIMBERLEY SQUABBLE.

WE have received from a correspondent a long series of newspaper reports and letters concerning the financial position of the Kimberley Hospital. A short time since "small-pox" and "pemphigus" were the daily pabulum with which the medical philanthropists nourished their personal friendships and antipathies. Now the scourge has vanished or abated, and fresh means of airing their grievances have been supplied to the "happy family." To an unbiased observer it is difficult to ascertain the exact truth where rival statisticians openly accuse each other of falsifying facts. "Pro bono Publico" says the average cost per head per annum at the Kimberley Hospital is £132. "Truth" puts it at £95 19s.—a greater difference than can be explained by what physicists term "errors of experiment." To our mind, it is scarcely possible to apply the working results of a British hospital such as the Royal Infirmary at Glasgow, as quoted by "Pro bono Publico," to the elucidation of the question of reasonable expenditure at the Kimberley institution. Distance may lend enchantment to the view, but it cannot be credited with enhancing clearness or accuracy of vision. The social and domestic circumstances obtaining in a distant colony, with which the paths of communication are difficult and few, are so widely different from what they are "at home," that no safe ground is afforded for comparison of the relative merits of apparently similar phenomena. It is not so much a matter of importance that the Kimberley Board of Management spends "four" or "two and a half" times as much on their establishment as suffices to liquidate the expenditure of a Scotch hospital, as it is to show that due attention is paid to economy and efficient administration. Hard times bring discontent, and Kimberley has during the last few years witnessed a rapid decline in her commercial prosperity. The hospital tax, which not long ago yielded something like £10,000 per annum, now provides only a little more than half that sum. But whilst the receipts have fallen short of the accustomed tale, the expenditure has not undergone a corresponding fall. There seems reason to fear, however, that certain abuses exist which might easily be remedied by zealous co-operation. If, as we are informed, the existing staff have the entire control over the medical and surgical appointments, we must enter a protest against the usage; but from our reading of the official reports we cannot convince ourselves of the accuracy of certain statements that have reached us. There is one point, however, on which seemingly all parties are agreed—viz., that the visits of the consulting surgeons are extremely irregular. This arises rather from the nature of the appointments than from laxity of discipline or want of interest on the part of the honorary officials. Either a definite number of beds should be apportioned to each officer, or all the patients should be seen by the surgeons in rotation. As regards the death-rate, which at first sight appears appalling, allowance must be made for the fact that of 189 natives who died in the hospital in 1884 eighty-six were "moribund when admitted." We should like to see a tabulated account of the fatalities from preventable diseases before too severely criticising the existing sanitary arrangements. One circumstance narrated in the resident surgeon's report stands in glaring prominence—viz., the prevalence and severity of venereal disease among the male community. The females, presumably, do not go into hospital, but wander free, moving centres of infection, and yet no provision is made for isolation of the contaminated. Cases of gonorrhœa, and syphilis in all stages, are mingled indiscriminately with patients suffering from such injuries and diseases as are commonly met with in a well-appointed hospital. Nor does the evil end here; for the ordinary female nurses have to attend to the general wants of all alike, obviously exposing themselves and others to the chances of accidental inoculation; to say nothing of the moral degradation which such a vicious system entails. Kimberley wants lock hospitals and a rigorously enforced Contagious Diseases Act. Lastly, as concerns the custom of allowing ministers of religion to enter the wards of the hospital at all hours without let or hindrance, we cannot but offer a word of admonition and advice. We yield to no one in advocating and insisting upon the utmost freedom being accorded to patients in the choice of their religious advisers; but there is a season and a place for all things, and in this instance, as it appears to us, it is not wise nor expedient that a clergyman should be permitted to enter a sick chamber and find himself, perchance, in a situation that neither himself, the patient, nor the nurse would deem desirable, even though "the soul is more important than the body."

ERYSIPELAS IN PARIS.

A DEBATE upon erysipelas has been occupying several sittings of the Paris Academy of Medicine, and at the last meeting M. Verneuil summed up the conclusions arrived at. "In Paris, a few years ago, erysipelas was very common and very fatal, especially in surgical practice. The antiseptic treatment of wounds has considerably diminished in frequency and gravity, without, however, succeeding in causing its complete disappearance; the erysipelatous endemic remains, ever ready to reproduce its epidemics, brief and restricted no doubt, but still involving a certain number of victims. It occurs in two distinct foci, the hospital and the town, which reciprocally infect each other. Antisepsis, powerful and efficacious in the nosocomial area, is almost impossible to be applied as a prophylactic measure in the urban area, that is and will long be contaminated; so that, after having by every precaution purified a hospital or a ward, a single case imported from the town suffices to again introduce the poison. It would be easy to prove that every year in our hospitals a certain number of patients attacked with other affections, sometimes trivial, succumb from the contagion of cases of erysipelas admitted from outside. In spite of the immense value of antisepsis, it is not applicable to all cases, and cannot prevent the introduction, dissemination, and multiplication of heterocthonous erysipelatous germs. Nor can it prevent these germs, cultivated and multiplied in hospitals, being subsequently reproduced in the town. In order to prevent re-infection of insanitary places and the dispersion of germs, to destroy the evil at its root, there is only one serious plan—viz., the isolation of cases developed within the hospital or introduced from the town. The establishment of isolation wards for the erysipelatous is a necessary measure, strenuously demanded both by science and humanity. Consequently, the Academy of Medicine demands of the authorities the immediate formation of such institutions." After some discussion, MM. Verneuil and Trélat were authorised to bring up a further report to the next meeting of the Academy.

WOOLWICH REFUSES TO APPOINT A MEDICAL OFFICER OF HEALTH.

A COMMITTEE of the Woolwich Local Board has now drawn up an elaborate report in answer to the statements made some five months ago by the Local Government Board's inspector, Mr. Spear, who strongly advised that the local authority should appoint a medical officer of health. The committee entirely dissent from Mr. Spear on the question of the advantage that would be gained by the appointment of such an official; they point out that the town is as healthy as other neighbouring towns where, of course, there are medical officers, and that the drainage, both public and private, and the overcrowding are quite as well under control as in those localities. With regard to disinfecting arrangements, they mention triumphantly that though "they have caused inquiry to be made as to the methods adopted in parishes and districts where medical officers of health are engaged, the result of such inquiry is not such as to induce your committee to recommend any alteration of the existing system in this parish. The adjoining parishes, where medical officers are engaged, have availed themselves of the system adopted by this board, and have not suggested any alteration." They also say that they are strongly of opinion that by putting in force the powers which the board possesses in sanitary matters, with the valuable assistance which they have at all times derived from the medical practitioners of the town and district, they will be enabled to fulfil all the duties incumbent upon them without a medical officer—they are always ready to appoint one temporarily for a special purpose. If they can be shown that other districts are better managed than their own because of the existence of a medical officer, they will be happy to reconsider the question; but Mr. Spear's report has failed to carry conviction to their minds.

SECTARIAN SISTERHOODS IN HOSPITALS.

PUBLIC opinion is beginning to be offended with the encroachments of religious sectarianism in hospital management. The evil is not a new one, and, as might perhaps have been expected, it has manifested itself on more than one occasion in an acute form in the proceedings of nursing sisterhoods. Belief and propagation of belief very commonly go together, and the sisters who have sought at the bedside to inculcate their particular tenets have acted no doubt in accordance with the teaching of an over-mastered conscience. Among themselves, moreover, they have not been wanting in an intolerance which excludes from membership, even in the secular work of their essentially liberal calling, every qualified nurse who does not assent to their peculiar and often very incomplete views of religious truth. The term "sisterhood" would seem to imply the exhibition of two principles: one, that skilled nursing is valuable; the other, that its efficacy requires the presentation by nurses to the sick under their care of one particular form of religion, and no other. The sister's perception of divine light is to serve for the whole ward: it does not matter that the supporters of hospitals or the patients represent every possible shade of belief, and that they in common desire that no restriction shall be placed on private judgment in such matters. Clergymen, lay teachers, friends, indeed, may enter and depart, but the constant spiritual atmosphere of the hospital must be maintained at a certain assumed purity, and that is to be regulated by the opinion of the nursing staff under their Sister Superior. If this is not the meaning of the doctrinal tests applied by these ladies, what is their meaning? The question, though extra-medical, is well worthy the consideration of hospital authorities and their supporters. The anomalous proceedings of such sisterhoods have long ago passed the bounds of our own approval. If they are persisted in, we can foresee only injury to the nursing body themselves, and difficulty, on other grounds most undeserved and regrettable, to the hospitals. Disease takes no note of creed; its treatment implies none, excludes none. We shall gain nothing by seeking to controvert the natural plan, or the law of liberty and of fairness, which distinguishes true Christianity above every other faith.

A CUBAN CURE FOR NEURALGIA.

DR. ANTONIO L. ESPERON reports in the *Crónica Medico-Quirúrgica* of Habana, Cuba, two cases of neuralgia treated with parthenin, a drug extracted from a plant known in Cuba as "bitter broom" (Escoba amarga). The first was a married woman, aged twenty-three, who, after an abortion, became subject to severe pain at the menstrual periods affecting the iliac fossæ. In one of these attacks, when the author attended her, he found morphia, chloral, and bromide of potassium useless, but that relief was afforded by quinine. In a subsequent attack, when there were rigors, headache, pyrexia, and furred tongue, ovarian neuralgia was diagnosed. A subcutaneous injection of morphia was given, and afterwards one-sixth of a gramme of parthenin every two hours was ordered. At the next visit it was found that after an hour the effects of the morphia began to pass off, and the pain had returned. The medicine had not been administered. After three doses of the parthenin the pain disappeared, and did not return. The second case was that of a coloured woman with severe coccydynia. Morphia only relieved this temporarily, but after a few doses of one-sixth of a gramme of parthenin in pills the pain permanently left her. The writer has also employed parthenin in many cases of facial neuralgia with great success. He believes that it is especially indicated in neuralgias of malarial origin.

THE TRAFFIC IN GIRLS.

THE *Pall Mall Gazette* of June 16th contains a report of a meeting held in Whitehaven to consider means for repressing the traffic in English girls. With the general purpose of such meetings no one who values the welfare of his kind can refuse to sympathise. The existence of the traffic we have referred to may be taken as proved by recent examples. Indeed, it is in the nature of the immoral commerce which it serves that such a traffic should flourish wherever it is allowed to do so. We must, however, in order to accomplish the removal of this evil, be sure first of all of the accuracy of our details respecting it. One statement in the report we have referred to is quoted from Mr. James B. Wookey, and bears absurdity on the face of it. It is gravely said that "in eight years, in three London hospitals alone, twenty-seven thousand children between the ages of eleven and sixteen have been treated for terrible diseases." This is an exceedingly vague statement. What are terrible diseases? Mr. Wookey does not appear to have defined his meaning. If he means by this term to describe venereal disease, the obscurity increases. Diseases of this class unfortunately do not as a rule present an aspect sufficiently terrible, otherwise there would be a more general and wholesome dread of them. Even when we allow that their insidious action ought to be deterrent, if it is not, we are no nearer the mark. We do not know the nature of that large body of cases, and we may say with certainty that acquired syphilis has no connexion whatever with the majority of them. The system of case registration at the London hospitals would probably not suffice to establish the accuracy of so large a statement with regard to out-patients, and it is known that no such number of venereal cases have been treated within the wards of any three hospitals. Those who would protect the youth of either sex from its most dangerous folly must be very careful of their facts and regular in their methods. They will then, but only then, carry with them the opinion of the country, and may be as unsparing as they have good reason to be towards the common enemy.

THE PRINCE OF WALES AND THE WORKING CLASSES.

THE Heir Apparent to the Throne is so worthily treading in the footmarks of his father that scarcely a week passes which does not supply some opportunity for an effort on the part of his Royal Highness for the public good. On Tuesday the Prince of Wales pleaded on behalf of an undertaking which is designed to supply the residents of Whitechapel with a popular place of resort for purposes of healthful exercise and improvement. There can be no question as to the need and value of this benevolent enterprise. Meanwhile we venture to hope it will not in any way clash with the undertaking in progress, at the instance of the Earl of Shaftesbury, in the same district. It can scarcely be possible that the two good and useful works promoted by philanthropists of all parties and schools should clash, but we venture to suggest that Sir Edmund Hay Currie should explain the facts more fully, especially after the letter of Mr. Charrington in *The Times* of Wednesday.

REMOVAL OF TUMOURS FROM SCARPA'S TRIANGLE.

M. KIRMISSON recently contributed a paper on the removal of tumours from Scarpa's triangle to the Société de Chirurgie de Paris. He points out that whatever be the nature of the tumour, the steps of the operation must be influenced by the anatomical relations of the part, and especially by the proximity of the tumour to the main vessels of the limb. He recommends the operator to free the tumour on its outer side first, and gradually to work towards the general sheath, leaving this part to be dealt with last; this is, of course, only a well-established surgical practice in all similar cases. When the tumour is closely connected with the main vessels, its removal may be complicated with one of three conditions—the vessels may be exposed, the vein may be wounded, or the vein and artery may both be divided. Wherever practicable, the sheath of the vessels should not be opened, but exposure of the vessels in the wound may be accepted as free from special danger if the wound be kept aseptic and devoid of inflammation. What line of practice is to be followed when the femoral vein is wounded? Some surgeons, among them Kümmel and Kraske, have advised that both the artery and vein should be ligatured; but such a practice is to be wholly condemned. To tie the artery is greatly to complicate the case and increase the danger of gangrene. Experience has proved the danger of lateral ligature of large veins, and the best practice is to put a double ligature on the vein above and below the puncture and divide the vessel between. Where the tumour is found to invade the vascular sheath to such an extent as to necessitate the division of both vessels, if it be entirely extirpated three courses are open to the surgeon—to remove the tumour partially, to ligature the vessels above and below, or to amputate the limb. Ligature of the femoral artery and vein above the origin of the profunda branch presents such great danger of subsequent gangrene of the limb that it is never justifiable. Should the tumour be situated lower down, so that the ligature would leave the deep femoral vessels to carry on the circulation, it should be excised completely and the main vessels tied. This may be done with greater confidence in young people than in those *past middle life. Should gangrene come on, amputation* must be performed. In the cases where this practice cannot be followed, the incomplete removal of the tumour—unsatisfactory as it is—is the wisest course to follow if any operation has been attempted. Amputation at the hip-joint is too dangerous an operation to be undertaken in circumstances which render recurrence of the growth, either locally, or, in internal organs, extremely probable. The best course to follow in such cases, if they be recognised before operation, is not to attempt removal, but to use palliative measures only.

THE FLOWER MISSION.

SOME months ago we published an appeal on behalf of the Flower Mission. At that time the flower season was just closing, and our remarks had therefore a somewhat retrospective meaning. Now we have reached the middle of a luxuriant summer, and it may be well, while the subject of hospitals is before the public eye, to place before it also the claims of this appropriate, inexpensive, and most acceptable form of contribution. The needs of the sick in hospital in their various degrees of suffering do not require to be pressed anew. That the gifts of flowers which they receive are appreciated there can be no doubt. They like the attention implied in such an act of kindness, as who would not? Probably they do not fail to note any care that may have been taken in selection on the part of those who bring these simple gifts. We do not mean that the choice of suitable flowers implies any laborious discrimination, but some taste, nevertheless, has to be used in avoiding extremes of odour and colour. In making presents of this kind, whether they come from the field, the garden, or the hothouse, it should not be forgotten that the simplest, and it may be the most usual and familiar, are often the most esteemed. There is also a necessary and inartistic method in giving. It is best to give without saying much. A word or two will go a long way, for the flower illustration speaks for itself, and has the advantage that it wearies no one.

RUPTURE OF THE PERINEUM.

WE have before us an interesting paper by Dr. W. P. Manton of Detroit, Michigan, reprinted from the *American Journal of Obstetrics*, advocating the practice of episiotomy, or the lateral incision of the perineum, for the prevention of perineal rupture. This operation has not been so favourably regarded by authorities in this country as by some German obstetricians. Dr. Lusk of New York, in his admirable book on the "Science and Art of Midwifery," while advocating various devices for regulating the passage of the head over the perineum, says that "when rupture seems inevitable," the physician is justified in making lateral incisions; but he adds that as every wounded surface in childbed is a source of danger (by risk of infection), episiotomy should never be performed so long as hope exists of otherwise preserving the perineum. He adds the somewhat severe remark: "It is essentially the operation of young practitioners, the occasions for its employment diminishing in frequency with increasing experience." We will leave Dr. Manton to settle this difference with his senior colleague in the obstetric art. He is young enough, perhaps, to feel the force of Dr. Lusk's criticism, but he does not speak without a large experience. He shows the great frequency of the occurrence of ruptured perineum. He denies that infection is more frequent after episiotomy. He has notes of 957 primiparæ in the Vienna clinic, and in only two of the cases did posterior laceration occur after episiotomy. These were both forceps cases. Professor Credé gives an analysis of 1000 cases of primiparæ, showing that only 2·9 per cent. were ruptured after episiotomy. We *confess to still feeling a considerable objection to the operation*, and to doubting the necessity for its frequent use. We can easily imagine it performed hastily and to the neglect of the ordinary methods of supporting and saving the perineum, which are tolerably effective, at least as against bad ruptures. In forceps operations especially, where, on Dr. Manton's own showing, episiotomy does not necessarily save from rupture, many perinea would be saved if the operator would seek the assistance of a neighbouring practitioner, whose chief duty it should be to support the perineum while the head is passing. It is very difficult for the accoucheur using forceps to execute the double duty of extracting with one hand and supporting the perineum with the other, and it is in these cases that the most serious lacerations occur.

THE METROPOLITAN ASYLUMS BOARD.

AT the usual fortnightly meeting of the Metropolitan Asylums Board, held on the the 20th inst., a letter was read from the Local Government Board authorising the purchase from the Admiralty of the ships *Atlas* and *Endymion*, the prices to be paid being £8400 and £6500. A report was also read from Dr. Birdwood, the medical superintendent of the hospital ships, *on the subject of the non-alcoholic treatment* of small-pox patients. He stated that, from being a firm believer in the treatment of small-pox patients by alcohol, he had, at the suggestion of his colleague, Mr. Bott, gradually reduced the administration of alcohol until now spirits and wine had been disused altogether, and, with a larger average number of patients, only 318 pints of beer were given in a week, whereas formerly, in addition to wine and spirits, nearly 9000 pints had been given. Dr. Birdwood added that he had proved alcohol to be injurious in the treatment of small-pox; hence he had ceased from prescribing it, except in moderation, for convalescents. The report was ordered to be be entered on the Minutes.

CORONER'S INQUEST IN WALES.

ON Friday, May 29th, an alleged murder was committed and suicide attempted at Aberystwyth. The facts relating to the event seem not to have been disputed, and we may at once say that the decision of the magistrates to send the case for trial on the capital charge was fully warranted by the evidence. At the request of the Mayor, Mr. Rees Davies repaired to the scene of the tragedy, where he found the victim quite dead, with blood issuing from the mouth and what appeared like a bullet wound in the left upper jaw. He did not make an exhaustive examination, for in truth he had no legal right to do this unarmed with a coroner's order, as the corpse was in the official custody of that functionary. *At the inquest* Mr. Davies is reported to have said that he believed "the wound in the face was enough to cause death." Before the magistrates he gave a less decided opinion, and it was at this juncture that there appears to have arisen the notion, that in the interests of justice a post-mortem was desirable—nay, even necessary. But the jury having delivered their finding, the coroner had lost his jurisdiction in the case, and the justices having no power to issue the necessary instructions, an appeal had to be made to the Home Secretary for permission to reopen the inquiry into the mode of death. Curiously enough, the coroner (Mr. Rowland), who seemed to agree with the jury that a *sectio cadaveris* was not needed, himself conducted the investigation after his court had declared itself satisfied. Mr. Rowland, in his "true version of the case," published in the form of a handbill, seeks to justify his course of procedure by saying that Mr. Davies, in answer to a question by a juror, deposed that "the wound was enough to cause death," whilst afterwards he qualified the statement by adding the words, "if the bullet had pierced the brain it would do so." As yet, however, there was wanting proof that the brain had been injured by the missile. Presumably the wound was enough to account for death; probably it was the bullet that caused the wound; but surely stronger evidence would be required to obtain a conviction. In the first place, it was mere matter of speculation where the bullet was lodged, and, consequently, whether the wound inflicted by it was the cause of death. Mr. Rowland should have issued an order for a post-mortem examination before the inquest was opened, or, to say the least, before it was closed. It was scarcely in keeping with the dignity of his office to personally conduct the search for evidence which should have been placed before him for his judicial consideration.

DIAPHORETIC TREATMENT OF NEPHRITIS.

N. HESS, having made a number of observations on the treatment of nephritic patients by wet packs, hot baths supplemented by wrapping in blankets, and hot-air baths, draws the following conclusions:—(1) The least rise of temperature occurs with packs, the greatest with hot baths. (2) While the temperature is found to sink still further twenty minutes after the pack, it remains at the same height for an hour after both the other methods of treatment. (3) After water baths the temperature regains its original height more slowly than after air baths. (4) During the pack the pulse becomes slower; during both water and air baths, on the contrary, it is quickened for an hour afterwards. (5) Under the influence of the pack respiration is moderately quickened; during both water and air baths it is still more quickened, but subsequently returns to its normal rate more rapidly than after the pack. (6) The most powerful sudorific effects are produced by hot baths, the least powerful by packing. (7) Though the baths are more stimulating, packing soothes the action of the nervous system, brings the patients on better, and produces a subjective feeling of improvement afterwards. (*Vrach*, quoted in *St. Petersburg. Med. Woch.*)

SICK NURSING.

DR. DUCKWORTH's admirable inaugural lecture on "Sick Nursing essentially a Woman's Mission" should be read by all women who aim at being nurses whether in private or in hospitals. The calling of the nurse is indeed a responsible one. It is growing rapidly in public estimation. Hitherto there has been much prejudice against regular nurses, founded chiefly on an impression that they are unsympathetic, that they require more attention than they give, that they are not to be always trusted alone and in the night with those disabled and helpless, and on the experience that many nurses are too fond of stimulants. These faults have certainly not always been absent in professional nurses who come to the sick house as if they came "to be ministered unto, and not to minister." The nurses who take Dr. Duckworth's address for a guide will obliterate all such impressions and raise their vocation to a high pitch of esteem among men whether rich or poor. He is plain-spoken as to the virtues and the qualities of a good nurse, and makes effective allusion to some of the old worthies of the calling in St. Bartholomew's: one to Sister Hope, who came in as a patient and had to lose a leg by amputation, but who survived and became a Sister and remained in faithful and untiring service for forty years. He also mentions Sister Elizabeth, of whom Dr. Jeaffreson once said to Dr. Duckworth, "I have only to say to Sister Elizabeth, 'That case is a bad one,' and she will never hold her hands day or night to save it if possible." The lecture is worthily dedicated to Sir Sydney Waterlow, who has the ambition to make Bartholomew's as famous a school for nurses as it has been for medical men.

SUPRA-PUBIC LITHOTOMY.

IN the June number of the *Revue de Chirurgie* M. Montprofit records a case of supra-pubic lithotomy successfully performed by M. Terrier early last year. The patient was a man twenty-nine years of age, who had had urinary troubles for six years. He was emaciated and very weak and exhausted when he came under treatment, and the stone was considered to be too hard and large for perineal lithotomy. The suprapubic operation did not present any difficulty, and an irregular stone 1½ in. (40 millimetres) in diameter was removed. The subsequent progress of the case was interrupted by a bad bedsore over the sacrum, by phosphatic deposits in the bladder, and by the formation of two scrotal abscesses just beneath the penis. In spite of these complications, the man ultimately made a complete recovery. No mention is made of the weight or composition of the stone, two serious omissions in the record of a case of lithotomy.

CHOLERA IN SPAIN.

THE King of Spain has yielded to the representations of his responsible advisers and has abandoned his intention to visit the cholera-stricken districts of the country, but the Government has decided that three members of the Cabinet shall proceed to Murcia, where, according to the last return of June 21st, there were the previous day 98 cases in the city and 39 deaths, the total number of cases and deaths in the whole province being 325 and 131 respectively. Cholera is still extending in Valenc a, where in twelve hours there were five deaths in the city and three deaths in neighbouring towns. A few deaths continue to occur in Madrid, causing the greatest excitement to the tradespeople, who have draped their shops in black as a protest against the official declaration of the existence of cholera. The isolated cases which are reported in the villages adjoining the capital are doubtless the forerunners of local epidemics.

VARIX OF THE UPPER EXTREMITY.

AT a recent meeting of the Société de Chirurgie of Paris M. Bousquet exhibited a patient who had enormous varices of the right upper extremity. The veins had been enlarged since birth, and had not caused any functional disturbance of the part. There were no varices in the lower limbs or in the spermatic cord. Other examples of varix in the upper limb are recorded by various writers. Brodie refers to a case of considerable varix of the veins of the forearm which followed upon inflammation and obliteration of the median-cephalic and cephalic veins. These cases are analogous to many others recorded by himself and of almost daily observation, where, from the presence of an aneurysm or other form of mediastinal tumour, the superior vena cava or one of the innominate veins is obliterated. Three years ago Mr. Thomas Smith showed at the Clinical Society of London a girl who had considerable dilatation of the superficial veins of the hand and forearm. The varix had developed after a burn, and was associated with a similar change in the arteries of the part. One of the most famous of these cases is that recorded by Petit. The varix was situated at the bend of the elbow, and Petit performed venesection upon it 150 times, as the patient was so fat that no other vein could be found for the purpose. Velpeau states that he had seen two persons with the arms, forearms, and hands covered with varicose tumours.

BRITISH DENTAL ASSOCIATION.

It is intended to hold the annual meeting of this Association at Cambridge this year on August 27th, 28th, and 29th, under the presidentship of Mr. Richard White, of Norwich, and an ample programme is already provided. The university authorities have been most cordial in their recognition of the Association; the natural science class-rooms have been placed at the disposal of the committee, and the debating hall of the Cambridge University Union has been lent for the chief meeting place. This is the first time in the history of the Union that such a concession has been made, and the members of the Association will be, in addition, honorary members of the Union for the time of meeting, a most courteous and liberal acknowledgment on the part of the authorities. The Master and Fellows of Caius College have generously offered sleeping accommodation for some of the chief officers of the Association, and besides this, they have given the use of their large dining hall for the annual dinner. A garden party will be held in the grounds of one of the other colleges, and altogether the members of the British Dental Association may congratulate themselves upon the very advantageous circumstances in prospect for their meeting in this most interesting and quaint old town.

DR. FERRAN'S INOCULATIONS.

The interesting account given by our correspondent last week of the inoculations for cholera now being so extensively practised by Dr. Ferrán, may be supplemented by the fact that the Spanish Government, acting upon the recommendation of the commission sent to report on the subject, has authorised the continuance of these "experiments." In a letter to M. Pasteur, whose views upon the protective character of inoculation with attenuated virus form the basis of the practice, Dr. Ferrán says that, although actual immunity may not be obtained, still his vaccinations will alleviate any attack which may occur subsequently. As a result of the official sanction, we may expect to hear of a very considerable increase in the number of inoculations.

THE TAIL OF THE HUMAN EMBRYO.

At a recent meeting of the Paris Academy of Science, M. H. Fol gave an account of his investigations upon the tail of the human embryo. At an early period of development—about the fifth or sixth week—there are several distinct caudal vertebræ behind the sacrum. The embryo is then from nine to ten millimetres long, but when it attains a length of twelve millimetres the total number of vertebræ is already reduced from thirty-eight to thirty-five. At a later stage, when the embryo measures nineteen millimetres, only thirty-four vertebræ can be distinguished, the thirty-fourth being obviously made up by the fusion of the four terminal ones.

We are glad to learn that the price of hydrochlorate of cocaine has been considerably reduced, and may now be obtained at the principal chemists for 1s. per grain. We are informed that there is a probability that in the course of a few days the cost of the anæsthetic may be still lower.

Writing in the *Deutsch. Med. Wochenschrift* for the 18th inst. upon the Policlinic for Diseases of the Teeth and Mouth in the newly established Dental Institute of Berlin University, Professor Busch states that hitherto only two cases of death attributed to poisoning by nitrous oxide gas during inhalation for anæsthetic purposes have been recorded. Both occurred in 1884: one at the Dental Hospital in London—a man who was having a tooth removed preparatory to excision of cancer of the tongue. In this case a tumour was found post mortem growing from the skull and compressing the brain; therefore Dr. Busch does not think death can fairly be attributed to the gas. The other case occurred in the practice of a Paris dentist; but as no record was obtained of any post-mortem inquiry, Dr. Busch suspends his belief in this case being due to the gas. The mere fact of death during the narcosis is not sufficient to attribute the fatal result to that cause.

Our contemporary the *Spectator*—which, by the way, is always liberal in its bestowal of praise on the medical profession—has lately been discoursing on the possible advent of cholera to this country. After indicating the probable path of transit, it proceeds to criticise the modes in which the disease spreads, ridiculing quarantine and sanitary cordons as "useless precautions." So far it follows closely in the groove of safety and accuracy; but when it comes to treatment, its enunciations are brief and a little startling to those who are accustomed to read in lay as well as medical periodicals of so many "tips" for cholera. Stimulants and astringents are all ignored, and expressedly cast on one side as useless, for "the only remedy as yet found efficacious is opium." Has the learned editor heard of "cholerisation?"—if not, we commend to his notice the experiments now being conducted by Dr. Ferrán.

From the report of the examination made by Colonel Sir Francis Bolton of the water supplied by the several metropolitan water companies during the month of May, it appears that the Thames water sent out by the Chelsea, West Middlesex, Southwark, Grand Junction, and Lambeth Companies exhibited a further improvement as regards organic matter, the average proportion being even less than in any month of last year. All the waters were clear and bright on delivery. Of the water drawn from the Lea, that distributed by the New River Company was, as regards organic matter, second only to the best deep-well water; whilst the East London Company's supply contained rather more organic matter than the Thames waters. Both samples were clear and bright.

Messrs. Crookes, Odling, and Tidy, in their report on the same subject, state that the character of the water supplied to the metropolis during the past month has been in every respect excellent.

The German Imperial Board of Health is about to publish a journal every week for the record of sanitary statistics, reports, records, and papers connected with the department. The scientific "Arbeiten" will be continued, but in the form of supplementary parts of the journal, and issued from time to time. The journal is to appear next month, and will be published by J. Springer, Berlin.

The Port of London Sanitary Committee, finding their hospital accommodation at Gravesend insufficient, have resolved, under the advice of their medical officer, Dr. Collingridge, to erect hospital tents for the treatment of cases of small-pox. One has already been put up by Messrs. Edgington and Co. within twelve hours of the receipt of the order.

IN the Medical Faculty of the Vienna University, Drs. Ultzmann, Wölfler, Mauthner, and Hofmokl have been nominated to extraordinary professorships. Dr. Ultzmann has made important contributions to surgery, especially in the subjects of lithotripsy and lithotomy; Dr. Wölfler, is well known as Prof. Billroth's assistant, and for his writings on "Excision of the Pylorus" and other surgical subjects. Dr. Hofmokl has also been engaged in teaching surgery for some time. Dr. Mauthner has done good work in chemical science. The *Allgemeine Wiener Medizinische Zeitung*, while stating that it does not as a rule approve of increasing the professoriate by extraordinary appointments, is bound to admit the justice of the present appointments, and he believes the promotions will be welcomed by the profession.

THE Chair of Helminthology at the Royal Veterinary College has, we understand, been vacated by Dr. Cobbold, F.R.S. It is not probable that any successor will be appointed in his place, as no inconsiderable part of the subject will naturally be held to fall to the occupants of the chairs of equine and cattle pathology respectively. The question of parasites, however, in relation to epizootics is of very great extent, and it is one to which Dr. Cobbold devoted a great deal of time and research. The destructive effects of the strongyloid worms in particular were thus brought very prominently into notice.

ON the motion of its President, Professor Guido Baccelli, the Royal Academy of Medicine in Rome unanimously admitted as honorary Fellows Sir Guyer Hunter, Dr. Thorne Thorne, Sir Joseph Fayrer, and Dr. T. Lewis, the representatives of Great Britain and British India at the recent International Sanitary Conference.

AT the University of Berlin the First Clinic, formerly under the charge of Professor Frerichs, is now relegated to Professor Leyden. For the other clinical chair the Faculty have nominated Dr. Gerhardt of Wurzburg in the first place, and Dr. Leube of Erlangen in the second.

THE Local Government Board has recommended to the Public Loan Commissioners a loan of £20,000 at 3½ per cent. interest for the purpose of the new drainage scheme at Romford.

THE Brentwood Sanitary Committee has decided to provide a hospital for persons suffering from infectious disease.

REPORT
OF
The Lancet Special Sanitary Commission
ON
MARSEILLES AND TOULON.

No. II.

AT Toulon the sanitary defects of Marseilles are repeated, and even considerably accentuated. The great maritime and arsenal town of France does not even possess an adequate water-supply. A large number of houses have private wells, where the water is constantly contaminated; and but very few can boast of a closet. The street is the sewer, and the water in the gutters serves the double purpose of carrying away the sewage and of cleansing the houses. Women can be frequently seen in the streets with mops and towels, dipping these into the gutter, and then employing them to scrub the floors or the walls of their homes. Here and there, in the recess of a wall, may be noticed a *tinette* placed on the same level as the pavement. This betokens that the house possesses the uncommon luxury of a closet. A carelessly closed rough door only partially conceals the pail from view, and underneath the door the overflow of the *tinette* may be seen and smelt as it slowly oozes out, and, like everything else, finds its way to the gutter. In one of the streets, after passing by two or three of these *tinettes*, we watched a woman come out of a house, which evidently had no closet, and empty the foul contents of her *passares*, or deep night-stool, into the gutter. At the same time, and barely twenty yards further down the street, another woman, singing joyfully over her domestic duties, proceeded to dip a house-cloth into this gutter. When it was well saturated with sewage, she took it in-doors, where she used the moist cloth to wipe over the entire surface of the dining-room table. In due course, bread, fruits, and other edibles were laid on the table, though it was still damp with what was literally the sewage of the street. In another thoroughfare a dam had been made across one of the gutters, and in the water thus accumulated the bricks employed for the building of a house were carefully soaked; every brick had therefore absorbed a certain amount of sewage matter before it went to build the walls of that dwelling.

The condition of the houses in the narrow crowded streets where the cholera made the greatest ravages is in every respect about as bad as can be conceived. In the Rue St. Claire, Rue Miséricorde, Rue des Bonnetiers, Rue Hoche, &c., we visited several houses, and in several instances the back rooms were devoid of light. Some of these served the triple purpose of kitchen, bedroom, and scullery, and remained in a perpetual condition of impurity. On the other hand, in the new and wealthy quarters of the town there is little or nothing satisfactory to note from a sanitary point of view. The houses have closets, it is true, and have even adopted the Parisian system of cesspools; but these are so badly built that they infect the surrounding subsoil, and we had pointed out to us one of the handsomest and most modern among the new houses which is never exempt from typhoid fever. Three separate outbreaks have already taken place in this stately and luxurious building, though several of the flats are not yet let. Next door there were two cases of cholera, and opposite a case of typhoid fever. Indeed, typhoid seems to be more frequent in the new portion of the town, where cesspools have been built. Probably the healthiest houses in Toulon are the better class, but older dwellings, where there are no cesspools, but only movable pails without overflow, and where none but the water of the town-supply is used. Nevertheless, absolute safety cannot be found anywhere, because the entire subsoil is impregnated, and it is impossible to ward off the dangers created by the uncleanly habits and ignorance of the native population.

In the face of all these and many other facts, which the exigencies of space prevent our mentioning, the outbreak of cholera is only remarkable in so far as it does not occur more frequently and does not prove more fatal. That cholera is likely to revisit Toulon again and again there can be no doubt. That the high annual death-rate, officially estimated at 33·8 per 1000, is in a great measure due to preventable causes is equally obvious. That something effective will be done to remedy this disgraceful and barbaric state of affairs is not so certain. It should be easier at Toulon than elsewhere to bring about the necessary improvements. As a great maritime station, the Portsmouth of France, Toulon has a distinct claim on the State, but this claim has so far been an impediment instead of a facility; the local authorities expect the State to do all, or nearly all, that for which under other circumstances they alone would be held responsible. While the dispute continues between the State and the town as to who shall pay the cost of the improvements, nothing is done, and there are no signs as yet of any solution to this vexed question.

This has not, however, prevented the elaboration of extensive projects, and the scheme, presented by M. Dyrion, engineer of the town, has been approved by the Special Governmental Commission appointed to inquire into the matter. This official report is signed by Dr. Brouardel, President of the French Consultative Committee of Hygiene, and M. Bruniquel, Chief Engineer of the Ponts et Chaussées. The report emanates from the Ministry of Commerce, and proposes, in the first instance, that the waterworks of Toulon should increase their supply from 10,300 cubic metres to 17,000 cubic metres, and this under a pressure of 80 metres. At present the water reaches only the lowest levels. Then the report insists that each house should be supplied with trapped ventilated drains, provided with enough water to ensure their cleanliness. As Toulon is washed by an enormous quantity of storm-water heavily charged with sand, it would be difficult to build sewers capable of carrying away the rainfall. A surface drainage by gutters and the various rivulets of the district is best suited to this purpose; and, according to M. Dyrion's project, a separate canalisation of small pipes is proposed for the sewage matter. One pumping-station would suffice to deliver the whole sewage of Toulon with its 70,000 inhabitants at a spot situated near the Sablettes, to the west of the town. Here a sewage farm could be established, or else the outfall could be conducted straight into the sea. The pollution of various watercourses would then be prevented, for the neighbouring inhabitants would drain into the sewers. The sewers would be of iron, and the largest barely more than a foot in diameter. The foundations are so insecure that preference is given to iron, and it is proposed to use all the water coming from public fountains to feed automatic flushing tanks. On the whole, the scheme is an able combination of English and American systems of drainage, and would cost about £120,000. The further proposals to pull down some of the most insalubrious quarters, to build new broad streets, and, destroying some old fortifications, convert their sites into building land, involve a much larger outlay. All these schemes put together are estimated to cost £700,000, which is indeed a considerable sum for a comparatively small town.

Undoubtedly, if these schemes were fully applied, Toulon, now a focus of epidemic disease, would become one of the healthiest towns in France. If the financial difficulties were to be surmounted, there would, however, still remain the obstinate ignorance and indifference of the population. A system of house-to-house inspection enforced by Draconian bye-laws would be required to maintain the internal domestic cleanliness, which is the indispensable complement of a good system of drainage. In the meanwhile, Toulon is at least thus far in advance of Marseilles; it has submitted a complete scheme, and this project has been approved by the highest competent authority of France. The force of public opinion must now be exercised, so that these studies and projects may promptly lead to the fulfilment of promises long held out and as yet in no wise realised.

DR. RICHARDSON ON MEDICAL POETS.

IN the address on Medical Poets, delivered before the members and friends of the Students' Medical Society of Middlesex Hospital at their conversazione, on Thursday evening, Dr. Richardson claimed for medicine that she had produced three classes of poetic geniuses: the prose poets, the anonymous, and the actual. Like Apollo, who was God of Physic as well as of Music and Song, the followers of Physic had naturally and freely exchanged a common sentiment in both arts. It was impossible for men to go on for ages witnessing the griefs and joys of human life so intimately as men of medicine witness them without many being impelled to express themselves in song, and no single profession, consequently, had produced so many of the poet class. Claiming Virgil as belonging to medicine, and just touching with the lightest illustration on the exquisite melody of the Roman verse, the speaker observed that he should find in our country more material for his discourse than he could properly deal with in the brief period at his command, and should therefore refer to English poets only. We have had eleven poets of mark in this country; an unparalleled number as compared with the rest of the world. Treating of these by name, Dr. Richardson opened with Sir Thomas Browne, author of the "Religio Medici" who, in that immortal work, had not merely written one of the finest prose poems extant, but had given birth to and first modelled a sacred hymn, which was probably more frequently sung than any other in the English tongue. This was the evening hymn reconstructed by Bishop Ken from the hymn with which Sir Thomas Browne, after evening prayers, finished, he tells us, each day in preparation for sleep, and which, beginning with the stanzas,

> "The night is come: like to the day
> Depart not thou great God away,"

was read to the end from the "Religio Medici." Thence the transition was made to Sir Richard Blackmore, the voluminous poet, whose lines Dryden said were

> "Writ to the rumbling of his chariot's wheels,"

and on whom Pope in the "Dunciad" was even more severe. But, after all, Blackmore was a poet, and had he been content to compose one poem, "The Creation," instead of a dozen, he would have ranked very high amongst his class. From Blackmore the step was easy to Sir Samuel Garth, to whose life and character as poet and physician a tribute was paid beyond what has been usually accorded to him. The poem of "The Dispensary" and some translations from Ovid were warmly commended. From Garth the audience was led to Mark Akenside, from whose "Pleasures of Imagination" a quotation was culled; and from him to Armstrong, from whose poem on the "Art of Preserving Health" some special selections were given. After Armstrong the speaker came to dear old Oliver Goldsmith, one or two of whose lines and whose "Madam Blaise" were repeated with much animation. Following Goldsmith, Cotton of St. Albans, the author of the "Fireside" and other domestic pieces, was brought under notice, and after him Erasmus Darwin. On Darwin, the poet of all Darwinians and the poetic founder of all Darwinism, Dr. Richardson dwelt emphatically as on a man who, in every sense, was a gifted poet of the highest order as well as a philosopher, playing the same (or a better) part to Charles Darwin as that played by Plato to Aristotle. It is from this poet that the theory of the origin of species has its prime source. Erasmus Darwin shone better as a prose than as a rhyming poet. His poetic lines, long and monotonous, soon pall; but now and then, as in the little catch to "May," which was delivered in full, the facility for poetic music is well heard, so that possibly the poet rather failed from the character of the rhyme, the length of the poetic wave, which he usually selected, than from failure of genius. After Darwin, Crabbe was brought forward as a poet, bred to medicine and a faithful practitioner of it, and then a clergyman, equally faithful in that vocation. The poetry of Crabbe, always best when it is purely descriptive, shows the knowledge its author had gathered up in both of his professions, but in medicine most. The style—modest, forcible, musical—carries the reader along with it on the easiest and most graceful tide. In illustration, the speaker gave the audience the bright and well-told story of the boy who, found in a parish bound, was named by the sapient vestry Richard, because not one of the board rejoiced in that name, and Monday, because Monday was the day when

> "The unlucky peasant heard the stranger's cry,"

and who, sent to the workhouse to bear a youthful life of indignity, at last ran away, made a position in the world, and dying as Sir Richard Monday of Monday-place, immensely rich and honoured, left, in severe justice, to his native village

> "Two paltry pounds at every quarter day,
> At church produced for forty loaves to pay."

The last two poets brought on the scene were poets of our own century—John Keats and David Moir ("Delta" of *Blackwood*). To both warmest admiration was paid, and the incident of the two medical students, Keats and Stephens, sitting together when the famous first line of "Endymion"—

> "A thing of beauty is a joy for ever,"—

flashed across the mind of Keats, was naturally a medical student's incident to the letter.

From what Dr. Richardson further told his audience, it is clear that we have poets still amongst us: a leading surgeon who has written a drama, a physiologist who has tried his hand at the same art, a general practitioner who has "a budget of pieces," and a physician who has received a bardic distinction from the oldest of the old fraternities of the "order of nature." For these and their ultimate fate we must wait: they are not yet declared to the world.

The address closed with the brilliant lines of Keats, "A Draught of Sunshine."

NORTH-EASTERN HOSPITAL FOR CHILDREN.—On the 24th inst. a bazaar in aid of the funds of this institution, situated in the Hackney-road, was opened at the Cannon-street Hotel by the Princess of Wales.

HONG-KONG.

The annual report by the Colonial Surgeon on the health of Hong-Kong for the year 1884 contains some points of considerable interest. The death-rate of the European troops was 8·05, and of the Indian troops 24·24 per 1000 of strength. In the police force the mortality of the Europeans was 9·0, of the Indians 5·6, and of the Chinese 13·2 per 1000. In the Victoria Gaol the number of persons committed during the year was 4023, furnishing an average of 552 under confinement; among whom the admissions into hospital were in the ratio of 625, and the deaths of 5·45 per 1000—both very low. The weights of 87 habitual opium smokers were taken on their entrance and weekly for the first four weeks of their confinement in gaol, with the following results: 47 had gained, 28 had lost weight, and 12 had undergone no change at the end of the period. Mr. Ayres, the Colonial Surgeon, remarks, "I can find no special symptoms common to all opium smokers when deprived of the use of the drug; they are all ready enough to complain if there is *anything the matter with them, and are all* watched with the greatest care, and I find nothing to recall in anything I have stated in previous reports." One opium smoker died during the year, of general debility, being the first death among that class which has occurred in the gaol in a period of eleven years. In the Civil Hospital the death-rate among the cases admitted was—of Europeans 3·15, of coloured persons 1·24, and of Chinese 6·08 per cent.; in the gaol it was only 0·95 per cent. In the Tung-Wa Hospital, which appears to be one for the Chinese sick poor, and to be under the care of "the so-called doctors of the Tung-Wa Hospital," the deaths amounted to no less than 51·2 per cent. of the admissions. No information is given as to the diseases by which this excessive mortality was caused, but of the 755 that died, 291 are reported to have been moribund on admission. We trust that in future reports some detailed information will be given on this subject. In calling attention to this want of information, we think it but fair to Dr. Wharry, the superintendent of the Civil Hospital, to quote his remark: "A hospital report should include something in the shape of scientific observation, and might be expected to contribute something towards a knowledge of the diseases of the locality. This is out of the question, however, with one medical officer in sole charge of a general hospital of ninety-eight beds, a small-pox hospital of ten beds, and medico-legal work to perform as well." Mr. Crow, the Government analyst, gives a good account of the work done in the Government laboratory. The water-supply at Hong-Kong is obtained from two sources—the Pokfúlam reservoir, which is reported to be satisfactory, and various wells, many of which are unquestionably of a dangerous character. Some of them have been closed, but Mr. Crow is of opinion that this measure should be extended to a good many more of them. The analyses of bread and of milk afforded very satisfactory results. Four cases of suspected poisoning were examined: in two no trace of any poison could be detected; in the third opium was found; and in the fourth Mr. Crow was of opinion that the cause of death was the decoction of a drug known by the name of "Fooh-moon-keung," prepared from the Gelsemium elegans. "The Chinese have been aware of the poisonous action of this drug for centuries." The work done in the laboratory has been valuable, and we trust the Government may be induced to put the present temporary establishment on a permanent footing. It seems also very desirable that an addition should be made to the staff of the Government Civil Hospital, which under present arrangements appears to be decidedly overworked.

VOLUNTEER MEDICAL STAFF CORPS.

At the Mansion House, on Friday, June 19th, the Right Hon. the Lord Mayor in the chair, a public meeting was held to promote the interests of this corps. After stating the object of the meeting and recommending the movement to those present, the Lord Mayor was called from his position in the chair, which was subsequently ably occupied by Dr. Crawford, Director-General, Army Medical Department. The first resolution—"That this corps deserves the support of all classes of the community"—was proposed by General Gipps, C.B., commanding the Home District, and in a well-chosen speech was seconded by Sir James Hanbury, K.C.B., principal medical officer of the Home District, and supported by Mr. Furley. The second resolution—"That this corps is an essential part of the Volunteer force"—was proposed by Colonel Lumsden, London Scottish R.V., and seconded by Colonel Routledge, City of London, and supported by Sir William Mac Cormac. The third resolution—"That this meeting pledges itself to promote the interests of this corps, monetarily and otherwise"—was proposed by John Biddulph Martin, Esq., seconded by Sir Guyer Hunter, K.C.M.G., and supported by Colonel Shakespeare and General Lowry. All the speakers dwelt on the usefulness of the corps as a teaching element to young medical men, as well as a backbone and essential reserve to the Medical Staff Corps of the army. It was stated that the medical officers of the army had already grasped the importance of the movement, but that it would take a long time to educate the mass of civil practitioners to take their rightful places in public movements of this kind. Especially in this particular enterprise might it be expected they would come forward, as it is the first organised movement of the kind ever started by civil medical men in this or any other country.

The Volunteer Medical Staff Corps held its first church parade at St. Paul's on June 14th, being Hospital Sunday.

On Saturday, June 13th, the corps paraded at Woolwich Arsenal, when a course of instruction in loading and unloading ambulance waggons was gone through; as many as six waggons being available.

THE HOSPITAL SUNDAY FUND.

The following is a list of the principal contributions which have been received on behalf of the Metropolitan Hospital Sunday Fund since our last issue:—

St. Jude's, South Kensington (Rev. Dr. Forrest), £702 2*s.*; Regent-square Presbyterian Church, £121; St. Peter's, Cranley-gardens, £175 9*s.* 9*d.*; St. Peter's, Vere-street (with additions), £215; St. Mark's, Hamilton-terrace, £200 1*s.* 7*d.*; Bromley (Kent) Congregational Church, £100 7*s.* 3*d.*; Parish Church of Holy Trinity, Sydenham, £107 3*s.*; St. Paul's, New Beckenham, £103 4*s.* 3*d.*; Union Congregational Chapel, Islington, £101 1*s.*; Holy Trinity, Paddington (with additions), £183 12*s.* 6*d.*; Delta (a further contribution), £200; St. Peter's, Bayswater, £112 13*s.*; St. Stephen's, Paddington, £117 12*s.* 11*d.*; St. Peter's, Eaton-square, £458 3*s.* 3*d.*; St. Paul's, Wilson-road, £114 1*s.*; Portman Chapel, £168 12*s.* 5*d.*; St. Paul's, Avenue-road, £100 18*s.* 3*d.*; St. Paul's, Knightsbridge, and St. Mary's, Graham-street, £300 12*s.* 3*d.*; Holy Trinity, Upper Chelsea (Rev. Prebendary Eyton), £133 13*s.*; Wimbledon churches (St. Mary's, Christ Church, St. John's, and St. Mark's), £223 16*s.* 2*d.*; Grosvenor Church, South Audley-street, £107 8*s.* 8*d.*; St. Stephen's South Kensington, £179 14*s.*; St. Mary's, Bryanston-square, £118 12*s.* 6*d.*; St. Mark's, North Audley-street, £220 5*s.* 2*d.*; St. John's, Paddington, £177 5*s.*

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In twenty-eight of the largest English towns 5426 births and 3129 deaths were registered during the week ending the 20th inst. The annual death-rate in these towns, which had declined from 21·1 to 18·6 per 1000 in the preceding four weeks, further declined to 18·3 last week, a lower rate than has prevailed in any week since the beginning of this year. During the first eleven weeks of the current quarter the death-rate in these towns averaged 21·2 per 1000, against 22·1, the mean rate in the corresponding periods of the nine years 1876–84. The lowest rates in these towns last week were 10·5 in Derby, 13·6 in Portsmouth, 13·8 in Wolverhampton, and 14·2 in Halifax. The rates in the other towns ranged upwards to 24·2 in Newcastle-upon-Tyne, 25·5 in Manchester, 25·5 in Blackburn, and 31·7 in Cardiff. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 520 and 429 in the preceding two weeks, rose again to 454 last week. These included 187 from measles, 104 from whooping-cough, 55 from diarrhœa, 34 from "fever" (principally enteric), 25 from diphtheria, 25 from scarlet fever, and 24 from small-pox. No death from any of these zymotic diseases was registered last week in Derby; while they caused the highest death-rates in Liverpool, Blackburn, Cardiff, and Newcastle-upon-Tyne. The greatest mortality from measles occurred last week in Salford, Liverpool, Birkenhead, and Newcastle-upon-Tyne; whooping-cough in Cardiff, Plymouth, and Blackburn; scarlet fever in Preston and Wolverhampton; and "fever" in Norwich, Portsmouth, and Cardiff. The 25 deaths from diphtheria in the twenty-eight towns included 16 in London, 3 in Liverpool, 2 in Sunderland, and 2 in Cardiff. Small-pox caused 32 deaths in London and its outer ring of suburban districts (exclusive of 16 deaths of London residents recorded in the metropolitan asylum hospitals and camp at Darenth), 2 in Hull, and 1 in Manchester. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had been 1389, 1201, and 1222 on the three preceding Saturdays, had declined to 1119 at the end of last week; the admissions, which had been 272, 180, and 197 in the previous three weeks, declined to 163 last week. The Highgate Small-pox Hospital contained 62 patients on Saturday last, 13 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had declined from 305 to 231 in the preceding four weeks, further fell last week to 196, and were 46 below the corrected weekly average. The causes of 82, or 2·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Blackburn, Bolton, and in five other smaller towns. The largest proportions of uncertified deaths occurred in Huddersfield, Sunderland, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 21·8 and 20·6 per 1000 in the preceding two weeks, was 20·8 in the week ending June 20th, and exceeded by 2·5 the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 15·6 and 18·5 in Aberdeen and Paisley, to 22·8 in Glasgow and 28·9 in Greenock. The 508 deaths in the eight towns included 17 which were referred to measles, 16 to whooping-cough, 12 to diarrhœa, 10 to "fever" (typhus, enteric, or simple), 6 to scarlet fever, 2 to diphtheria, and 1 to small-pox; in all 64 deaths resulted from these principal zymotic diseases, against 74 and 63 in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·6 per 1000, which was 0·1 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of measles, which had been 15 and 13 in the previous two weeks, rose to 17 last week, of which 9 occurred in Glasgow, 4 in Greenock, and 3 in Edinburgh. The 16 deaths from whooping-cough showed a further decline from recent weekly numbers, and included 9 in Glasgow, 3 in Greenock, and 2 in Edinburgh. The 12 deaths attributed to diarrhœa showed a decline of one from those in the previous week, and were 8 below the number in the corresponding week of last year. The deaths referred to "fever," which had been but 3 and 7 in the previous two weeks, further rose to 10 last week, of which 5 occurred in Glasgow, 2 in Edinburgh, and 2 in Dundee. Five of the 6 deaths from scarlet fever were returned in Glasgow. The fatal case of small-pox also occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 126 and 94 in the preceding two weeks, were again 94 last week, which, however, exceeded by 4 the number returned in the corresponding week of last year. The causes of 82, or more than 16 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 23·1 and 29·1 per 1000 in the preceding two weeks, declined again to 27·5 in the week ending the 20th inst. During the first eleven weeks of the current quarter the death-rate in the city averaged, however, no less than 30·3 per 1000, the rate during the same period not exceeding 19·8 in London and 18·5 in Edinburgh. The 186 deaths in Dublin last week showed a decline of 11 from the number in the previous week, and included 20 which were referred to the principal zymotic diseases, against 15 and 24 in the preceding two weeks; 6 resulted from measles, 4 from scarlet fever, 3 from whooping-cough, 3 from diarrhœa, 2 from fever, 1 from diphtheria, and 1 from small-pox. These 20 deaths were equal to an annual rate of 3·0 per 1000, the rate from the same diseases being 2·7 in London and 1·9 in Edinburgh. The fatal cases of measles, which had been 13, 9, and 11 in the previous three weeks, declined to 6 last week, and were fewer than in any week since the middle of February last. The 2 deaths from "fever" were 5 below the number in the previous week, while those from scarlet fever, whooping-cough, and diarrhœa showed an increase. The fatal case of small-pox was the first recorded within the city since the beginning of the year. Seven inquest cases and 7 deaths from violence were registered, and 50 deaths were recorded in public institutions. The deaths of infants were 11 fewer than the number in the previous week, while those of elderly persons had increased. The causes of 31, or nearly 17 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

AMONG the officers who left Egypt for England, invalided, by the *Oregon*, on the 23rd inst., were Surgeon-Major F. Ferguson, Surgeon-Major P. R. Gabbett, and Surgeon K. S. Wallis. Surgeon W. Turner left Suakin, invalided, on the 16th inst., per *Lochard*.

The hospital ship *Ganges* has left Portsmouth for Suakin, where she will embark additional invalids for England. With the exception of a medical staff, consisting of forty-six doctors, nurses, and others, she went out empty.

ARMY MEDICAL STAFF.—Brigade Surgeon Nathaniel Norris is granted retired pay, with the honorary rank of Deputy Surgeon-General.

INDIA OFFICE.—The Queen has approved of the retire- from the Service of the following officers of Her Majesty's Indian Military Forces:—Surgeon-General William Robert Cornish, C.I.E., of the Madras Army; Brigade-Surgeon Sarkies Michael Shircore, of the Bengal Army. The following officers are granted a step of honorary rank on retirement:—Deputy Surgeon-General William Pearl, of the Madras Army, to be Surgeon-General; Brigade Surgeon William Henry Kirton, and Brigade Surgeon John Jones, M.D., of the Bengal Army, to be Deputy Surgeon-Generals.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Fleet Surgeon John Cockburn Messer, M.D., has been placed on the Retired List, with permission to assume the rank and title of Deputy Inspector-General of Hospitals and Fleets.

The following appointments have been made:—Staff Surgeon Herbert M. Nash, to the *Thunderer*; Surgeon Harold R. Osborne, to the *Philomel*; Surgeon Myles O'C. M'Swiny, to the *Valiant*; Joseph Stephens, M.D., to be Surgeon and Agent at Brighton and Blackrock: J. H. Foley, to be Surgeon and Agent at Carnsore and Rosslare; and Edward Greeve, M.D., to be Surgeon and Agent at Bonmahon.

ARTILLERY VOLUNTEERS.—1st Cornwall (Duke of Cornwall's): Arthur Hodge, Gent., to be Acting Surgeon.

RIFLE VOLUNTEERS.—3rd Hampshire: Edward Thomas Crouch, Gent., to be Acting Surgeon.—1st Cheshire: Francis Peirce, Gent., M.D., to be Acting Surgeon.—1st Perthshire: Alexander Thom, jun., Gent., M.D., to be Acting Surgeon.

UNIVERSITIES OF EDINBURGH AND ST. ANDREWS PARLIAMENTARY REPRESENTATION.—A dinner has, we understand, been arranged to take place at the Holborn Restaurant on Friday, July 3rd, at 6.30 P.M., for the purpose of giving Conservative electors of the Universities of Edinburgh and St. Andrews an opportunity of meeting Mr. J. H. A. Macdonald, Q.C., LL.D., Dean of Faculty, and Lord Advocate for Scotland under the new Ministry, the Conservative candidate for the representation of these universities in Parliament at the next election. Mr. Æneas Mackay, advocate, Edinburgh, is spoken of as the Liberal candidate for the seat. It is greatly to be regretted that a member of our own profession does not aspire to the representation of this important constituency.

Correspondence.

"Audi alteram partem."

THE DETERMINING TENDON IN DORSAL DISLOCATIONS OF THE HIP.

To the Editor of THE LANCET.

SIR,—We have been in the habit in this country—and it is an error into which I believe all our text-books lead us—of conceding to Professor Bigelow the honour of pointing out the influence of the obturator internus tendon in separating the dislocation upwards and backwards on to the dorsum ilii from the dislocation backwards, or upwards and backwards, into the sciatic notch, for which cumbersome nomenclature I propose in future to adopt the terms *superiliac* and *supersciatic.* Without doubt, we are much indebted to Professor Bigelow for his admirable work published in 1869, which has done so much to awaken a new interest in dislocations of the hip; but very difficult is it to know all that distinguished authors have written before our time, and Bigelow has clearly overlooked Malgaigne's *observations.* There is room in the world for all great men, and I am sure Professor Bigelow will owe me no ill-feeling for pointing out that the distinguished French surgeon, J. F. Malgaigne, had long forestalled his observations on the influence of the obturator tendon. Indeed, considering the emphasis with which Malgaigne insists on this point, it is curious that it should not have attracted the notice of subsequent readers and writers. I will transcribe Malgaigne's words as they appear on p. 837 of his work "Traité des Fractures et des Dislocations," tome ii., published in 1855:—

"Ce qu'il faut faire ressortir, c'est que, dans cette luxation, *la tête s'échappe toujours au-dessous de l'obturateur interne* qui occupe la petite échancrure sciatique, et des jumeaux qui sont en quelque façon ses satellites. Tantôt elle déchire seulement le carré qui est au dessous, tantôt seulement les jumeaux, tantôt les jumeaux et le carré à la fois, *l'obturateur interne restant comme une barrière pour empêcher la tête de remonter;* et enfin, dans le cas de Wormald, si l'obturateur était rompu, ce qui restait des jumeaux en faisait l'office. *Sans doute cette barrière peut être franchie, et alors la luxation devient iliaque;* mais quand elle est primitivement iliaque, c'est-à-dire quand la tête est sortie au-dessus du muscle obturateur interne, je doute qu'elle puisse redescendre au niveau de l'épine sciatique, à moins qu'elle n'y soit ramenée par les manœuvres du chirurgien. En un mot, *la tête sortant par-dessous l'obturateur interne est toujours luxée sur l'ischion,* et peut consécutivement remonter sur l'ilium; *la tête sortant par-dessus donne toujours une luxation iliaque.*"

The italics are my own, but nothing can be clearer or more emphatic than this statement of the influence of the tendon of the obturator internus in separating the supersciatic dislocation from the superiliac.

I am, Sir, yours truly,
R. CLEMENT LUCAS, B.S. Lond., F.R.C.S.

Finsbury-square, June, 1885.

"RENAL" PULSE ASSOCIATED WITH CHEYNE-STOKES' RESPIRATION.

To the Editor of THE LANCET.

SIR,—Professor M. Foster has been kind enough to afford me an explanation of the following observation made and inserted by me in my notes on a case of Dr. Whipham's in the York ward of this hospital. The professor was also kind enough to consider the observation sufficiently interesting for me to submit it to you for publication in THE LANCET.

"*Case of William S——, York ward, St. George's Hospital, May 28th,* 1885.— ...... The pulse at one moment is hard and full (renal), then it commences to slow down and grow weak, until, for a moment, it ceases entirely; again, after an instant's cessation, it recommences, growing slowly faster and stronger, until at the end of a few seconds it has become once more a pulse of the 'renal' type. Associated with this is the phenomenon known as 'Cheyne-Stokes' respiration.'"

But the most interesting part of the observation was, to use Professor Foster's own words, "that the heart and respiration alternated in rhythm, the heart being in full swing at pause of respiration, and being inhibited during height of respiratory period."

Professor Foster's explanation of this was that "apparently coincident with changes in the medulla oblongata leading to Cheyne-Stokes' respiration was a stimulation of the cardio-inhibitory centre in the medulla, occurring alternately with the former."

Being unaware that this state of the pulse has before been observed in conjunction with Cheyne-Stokes' respiration, I have ventured to submit this letter to you, in the hope that I may learn whether other observers besides myself have previously noted the fact. I may add, that on my calling attention to the above, it was observed in this case by others, and at the same time. Any excitement of the patient (he had been delirious for some days previous to, and was in a semi-comatose state at the time of, observation), such as moving him in his bed, &c., caused this double phenomenon to cease, only to return, however, when the patient was once again in his semi-comatose condition.

I am, Sir, yours faithfully,
HUGHES R. DAVIES,
Clinical Clerk to Dr. Whipham.

St. George's Hospital, June 17th, 1885.

THE COLLEGE ELECTION.

To the Editor of THE LANCET.

SIR,—Will you allow me to correct an important error in my letter which appeared in your impression of last week—an error which has just come to my knowledge, and which I am grateful for having had more accurate official information communicated to me, that now enables me at once to rectify it. I stated "that the office of Examiner in Surgery was restricted almost exclusively to members of the Council" of the College, whereas this is certainly not an absolute rule. As exceptions may be mentioned the present President and both the Vice-Presidents, each of whom was elected by the Council as an Examiner in Surgery before he became a member of Council, and the last two such Examiners elected are not on the Council.

I feel that I ought to have ascertained these facts, or have remembered the more recent exceptions, before making a statement which, however, had reference to the principle of generally combining the two offices of Examiner in Surgery and member of the Council.

Trusting you will insert this communication in your next impression, I am, Sir, yours obediently,

London, June 24th. FREDERICK JAMES GANT.

THE LATE MEDICAL OFFICER OF HEALTH FOR LEICESTER.

To the Editor of THE LANCET.

SIR,—My attention has been directed to your editorial note on the resignation of the medical officer of health for this borough, and I regret to find that you have been entirely misled by an article which recently appeared in a local paper. As a matter of fact, Dr. Johnston's resignation was due to the increase in his private practice preventing him giving that amount of time and attention to the duties of his office which his appointment required. This was assigned in his letter of resignation as the reason of his retirement, and in that letter he acknowledged the assistance he had ever received from the sanitary committee of this corporation. I feel it is due to my committee, to yourself, and to the medical profession generally—and I am pleased to say we have three members of the profession in the committee—that this explanation should be made; and its insertion will therefore oblige, Yours truly,

THOS. WINDLEY,

June 17th, 1885. Chairman of Sanitary Committee, Leicester.

CHESS. — Lord Tennyson and Mr. Ruskin, respectively president and vice-president of the British Chess Association, have, it is announced, each consented to give a copy of his works, with autograph, as prizes to be competed for in the tournament now proceeding. Lord Tennyson's prize is for the best two players in consultation, belonging to the professions of Medicine, the Law, Church, Army, or Navy.

MANCHESTER.

(*From our own Correspondent.*)

THE HOUSING OF THE POOR.

THE report issued by the Royal Commission on the housing of the poor is, to say the least of it, disappointing so far as suggesting any substantial remedy for the evils of overcrowding among the lower classes, the existence of which it emphatically demonstrates. In Manchester, some time ago, two experiments on a small scale were tried on a semi-philanthropic basis, but these have, up to the present, not been a financial success, though there is more prospect of this in the near future. The Town Council have not been inactive so far as demolishing whole districts in some of the worst neighbourhoods, but the failure has been in the lack of building houses in lieu of those destroyed, as the large vacant plots, especially in the neighbourhood of Deansgate, show. This subject is still occupying the attention of the municipal authorities; and in the last report of their medical officer of health allusion is made to this. He thinks that some attempt should be made to provide, outside the city, cottage dwellings to some considerable extent for the better-class artisans and operatives within a distance of two or three miles of the centre of the town, with tram and railway facilities for getting to and from their work. Probably some such arrangements as those on the Shaftesbury estate, near Battersea-park, London, might be found practicable, and he hopes that by thus removing the upper grades of the working class those lower in the scale would be able to use the cottages and houses set at liberty by others, and thus the lowest and worst class of property might more rapidly be got rid of. It is not unlikely that ere long some such scheme as this will be brought before the notice of the public generally and their help solicited, as it is admitted to be beyond the powers of the Corporation, even if they were willing to undertake the working out of such a scheme. There can be no doubt as to the benefit which would be derived by all concerned if such a project were carried out; those workmen and their families will benefit both physically and morally, whilst those remaining in the city would no longer be compelled to inhabit the slums and dens in which so many at present live.

THE SUPERVISION OF OUR MEAT-SUPPLY.

An interesting paper by Mr. Vacher was discussed at the last meeting of the Northern Association of Medical Officers of Health, the subject being the want of proper supervision of our meat-supply; he showed how very lax in many places are the regulations as to the proper control and arrangement of slaughter-houses and how easy it is for diseased animals to be put into the market as food. He advocated some such universal supervision and registration of all slaughter-houses and meat shops as now exist in regard to bakehouses and milk-shops and dairies, together with an official examination of all meat before being exposed for public sale.

THE COLLIERY EXPLOSION.

The columns of the daily papers will have informed your readers of the terrible catastrophe at Messrs. Knowles' colliery here last week. The scenes at the pit-mouth were heartrending in the extreme. It is known that moer than 170 lives have been lost. Within a very short time of the explosion a number of medical men were in attendance at the mine, but there was little to be done by them, as most of those who did not at once make good their escape were suffocated by the after-damp, or, as happened in many cases, sank half suffocated into the water which made its way into the workings, and were thus drowned. Some few of the injured who were got out alive were taken to the Children's Hospital, Pendlebury, and to the Salford Hospital. Surely, it does not seem too much to ask science that explosions such as this should be rendered almost impossible. If the ventilation were more vigorous, and the air swept through the workings with more force, escapes of inflammable gas might be so quickly diluted as to be rendered non-explosive. Great sympathy has been expressed throughout the land for the families of the sufferers, and the Lord Mayor of London has offered assistance. Our own mayor took immediate steps to open a relief fund, which has been promptly responded to, so that it is to be hoped that the sorrow and misery caused by this awful catastrophe will be to some little extent alleviated.

EXTENSION OF OWENS COLLEGE AND OF THE SALFORD AND THE EYE HOSPITALS.

The extensions of the Owens College are proceeding apace and the original block is now almost shut out of view from Oxford-road by the new wing. The College, like so many of the public buildings of Manchester, suffers architecturally by being so closely shut in on all sides that no good view of it as a whole is obtainable. The extensions, too, of the Salford Hospital are' progressing rapidly, and the new Eye Hospital is now practically complete, and will soon be ready for opening.

COUNTRY HOLIDAYS FOR POOR CHILDREN.

The committee who last summer so successfully organised country holidays for poor children of two or three weeks are again pursuing their good work in this direction, and ask for increased help, that many more of our children from the slums may this year, for a few weeks, breathe the purer air of the surrounding country villages.

NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

THE MEASLES IN NEWCASTLE.

THE epidemic of measles still prevails, and shows little sign of abatement as to numbers attacked; but I would fain hope, from conversation with practitioners, that the type is undergoing some change for the better as regards severity. The weather has not been at all favourable these last couple of weeks, considering the season, for any bronchial affections, but has been characterised by considerable variation of temperature, with high and gusty winds; upon the whole the temperature has been low for midsummer, with an absence of bright sunshine. As usual, when we are troubled with any general illness our papers are crowded with letters and suggestions from writers who, no doubt with the best intentions, know very little about what they are writing. One writer to-day commences very well with good general directions as to isolation, certification, and disinfection, &c., then he makes the utopian suggestion that a policeman or sanitary officer should be stationed day and night before each infected dwelling to insist upon the production of a pass or permit from the medical officer of health from every person leaving the infected house. Medical men are to wear waterproofs on visiting each patient, these garments to be supplied at the cost of the town by the sanitary authorities.

FATAL ACCIDENT TO A SURGEON.

A shocking and fatal accident occurred to Mr. John Middleton, of Butterknowle, near Bishop Auckland. About nine o'clock on the night of the 15th, as he was riding home to Butterknowle from Woodlands, his horse stumbled and fell, throwing its rider with such force to the ground that on being picked up he was found to be unconscious, and to have sustained a fracture of the skull which caused death in sixteen hours. Mr. Middleton, who was in his thirty-second year, was a L.R.C.S., and belonged to a well-known family in Ireland, being a son of the late Dr. Middleton of Mullingar. Much sympathy is felt for his widow. The funeral was attended by crowds of friends and patients.

Newcastle-on-Tyne, June 23rd.

EDINBURGH.

(*From our own Correspondent.*)

EDINBURGH FEVER HOSPITAL.

THE rather anomalous system of charitable support by which the Edinburgh Fever Hospital has been maintained for some years will come to an end on July 1st, after which date the necessary funds will be provided from the burgh rates. It is nearly a year since Lord Shand, one of the directorate, drew the attention of the managers of the Royal Infirmary to the fact that they were supporting an institution the maintenance of which was by statute incumbent upon the Town Council. The managers subsequently passed a resolution not to provide for the support of the Fever Hospital after the end of this month; and at a meeting held on the 22nd inst., they decided to offer the present buildings to the Town Council for a sum of £4000. These buildings are a part of the old infirmary, formerly known as the "Surgical House." They have been of late completely renovated; and as they, with the valuable site they occupy, are worth fully twice the sum named, it is scarcely possible that the civic authorities will decline the generous offer made to them.

GENERAL MEDICAL COUNCIL COMMISSIONERS.

The commissioners appointed by the General Medical Council to inquire into the system of teaching and examinations in the Scottish medical schools are at present in Edinburgh. They are attending the final examinations for the degree of M.B. and C.M. in the University, which are just now being held.

MOVEMENT OF THE ULNA IN PRONATION.

At the meeting of the Medico-Chirurgical Society held last week, Mr. C. W. Cathcart gave a demonstration of his views upon the causation of the lateral movement of the ulna which occurs in pronation. As the result of a series of experiments, he concludes that this movement is due to a rotation outwards of the humerus, which accompanies pronation, and which causes the inner condyle and the ulna to pass in a forward and outward direction. After demonstrating that the apparent lateral movement of the ulna does exist, he proceeded to show that it does not occur when the humerus is absolutely fixed; and to demonstrate this satisfactorily he made use of a case of complete ankylosis of the shoulder-joint, where any movement of the humerus was at once registered by corresponding movements of the scapula. When the whole of the shoulder girdle and the humerus were fixed, it was found that the lateral movement of the ulna did not occur, and it was hence concluded to depend upon the mobility of the humerus.

REMOVAL OF UPPER EXTREMITY.

Mr. Joseph Bell showed at the same meeting a patient whose whole upper extremity he had removed for sarcoma of the scapula. The recovery was a good one, and the general health had much improved since the operation.

Edinburgh, June 23rd.

PARIS.

(*From our Paris Correspondent.*)

CÆSAREAN SECTION.

At the meeting of the Academy of Medicine last week Dr. Guéniot read his report on a work forwarded by Dr. Closmadeuc relative to the Cæsarean section. The author had performed the operation three times successfully as regards the mother, and twice with equal success as regards the child. These operations were performed in the country under circumstances comparatively unfavourable, and if the patients got well it was, in Dr. Guéniot's opinion, owing to the mildness of the weather (month of May) which permitted the room occupied by the patients to be thoroughly ventilated, to their robust constitution, and finally to the ability of the operator. Encouraged by the successful issue of these cases, Dr. Closmadeuc is disposed to rehabilitate the Cæsarean section in opposition to Porro's operation—that is to say, the complete ablation of the uterus, which tends to grow in favour at the present time. On this Dr. Guéniot remarked that without going so far as Dr. Closmadeuc, he would affirm that Porro's operation is not so devoid of danger as one would be led to suppose, as the mortality from it has been registered at 58 per cent. Moreover, the Cæsarean section, performed with all the modern improvements which have been made in abdominal surgery, is not attended with the same danger as formerly.

A NEW APPARATUS FOR THE ADMINISTRATION OF CHLOROFORM.

In reference to his experiments on the production of anæsthesia with a mixture of chloroform and atmospheric air, M. Paul Bert presented, at the last meeting of the Academy of Sciences, a very ingenious and convenient apparatus, invented by M. Raphael Dubois, by which the quantity of chloroform and air may be regulated at will. The apparatus is reported to have been employed in a great number of operations in France and Belgium. M. Bert states that, if the patient be not addicted to spirits, he should have a mixture containing ten grammes of chloroform to a hundred litres of air, and seven or eight minutes suffice to obtain anæsthesia; whereas an alcoholic subject would require ten to twelve minutes. As soon as sleep is obtained, by a special arrangement of the apparatus the strength of the mixture is reduced to six grammes to the hundred litres, which is sufficient to maintain the anæsthesia. In conclusion, M. Paul Bert brought to notice the successful results obtained by a Belgian surgeon in five operations under this method—two tracheotomies and three ovariotomies.

LIMITATION OF THERMAL TREATMENT AT AIX-LES-BAINS.

A ministerial decree lately published in the official journal has caused some discontent, and justly so, among the medical men of Aix-les-Bains, as the decree limits to twenty-one days the maximum duration of the thermal treatment accorded gratuitously to certain privileged persons. The medical men have protested against the officious and unwarrantable interference of the Minister of Commerce, from whom the decree emanated, concerning their professional duties. The protest has had the support of the municipal authorities and the Deputy of Savoy, the latter having personally addressed the Minister on the subject, and it is hoped that this functionary will see his error and annul the decree without delay.

OUTRAGES BY LUNATICS.

There is evidently some mismanagement in the lunatic asylums of this country, for within the last two or three weeks circumstances have occurred among the inmates that would justify this assertion. About a week ago a lunatic, in the Saint Pierre Asylum at Marseilles, who was suddenly seized with hallucination, rushed out of his bed at night and, attacking another inmate with a saucepan, struck him a severe blow on the head, causing instantaneous death. Only a few days previously another sad occurrence took place in the same asylum. A keeper put two patients in separate baths and left them for a short time. During his absence one of them got out of his bath and turned on the tap of hot water into the bath of the other. When the keeper returned he found the unfortunate creature scalded to death. Last week another tragic scene took place in the lunatic asylum at Lehon, near Dinan, which is under the management of the Brothers of Saint Jean de Dieu. In this case one of the lunatics attacked a brother and struck him on the head with his wooden shoe, causing death after twelve hours of suffering. Another brother who had come to his assistance was severely bruised on the face by another madman, also with his wooden shoe. Both the patients got very much excited and made off for the doctor's residence with the intention of killing him, but, fortunately, they were prevented. The patient who murdered the brother had strangled his wife and attempted to kill his aunt, on which account he was sent to the asylum. Since his detention, however, which commenced some years ago, he appeared to be very quiet, and was considered almost cured.

Paris, June 23rd.

Obituary.

THOMAS PRETIOUS HESLOP, M.D., F.R.C.P.

ANGINA PECTORIS, the fatal ending of John Hunter Charles Bell, and many other illustrious lives, was the cause of Dr. T. P. Heslop's death at Braemar on the 17th inst. The son of a Scotch officer in the Artillery and of an Irish lady, Dr. Heslop was born in the West Indies in 1823. His boyhood was passed under the roof of his uncle, Dr. Thomas Underhill, the leading practitioner at Tipton, Staffordshire. Here was imbibed and cultivated a love for medical study, afterwards pursued with conspicuous success in Dublin, and in Edinburgh, where he graduated M.D. in 1848. A few months later, the governors of the Birmingham General Hospital resolved on dividing the work of their hitherto single resident officer, and Dr. Heslop was elected the first house-physician of that institution. It was not long before he gave evidence of that ardour of temperament which characterised him through life. The new appointment was soon vacated; but the young physician had already given such striking proof of uncommon aptitudes that he was not long out of office. Successively Professor of Physiology in the Queen's College, and physician to the Queen's Hospital and the General Dispensary, he became the leader of the staff of the Children's Hospital, which he founded, as he did the Skin and Lock Hospital. He also contributed powerfully to the establishment of the Women's Hospital and of the Birmingham Medical Institute. He was a justice of the peace, a governor of King Edward's School, and a trustee of Sir Josiah Mason's Science College. Of the latter institution he was bailiff and President of Council at the time of his death; and he could not have left a more worthy and appropriate monument than the library of the College, which owes its chief treasures to his best impulses. Inspired by many noble sentiments, impelled by tumultuous energy, faithful to his life's work, without heeding the unerring warnings of anginal seizures, Dr. Heslop's was a great life. Poor in worldly means, like many other distinguished men, at the onset of his career, his rise to comparative affluence as a consulting physician was not rapid. When he realised it, unlike some successful men, he was most generous in the partition of his share of fortune's favours. He was unmarried; and so intense was his devotion to the institutions with which he was officially connected, that, for them, his loss is wellnigh irreparable.

D. MANSON FRASER, M.A., M.D.

DR. FRASER, whose untimely death in Borneo we recorded in our last issue, was born at Invergordon in 1857, and was educated at the Grammar School and University of Aberdeen. At the latter place he had a distinguished career, graduating as M.A. in 1876, with first-class honours in Mathematics and Natural Philosophy, and honours in Natural Science, besides being Boxhill Mathematical and Natural Science prizeman. He immediately followed on to medicine, and graduated M.B., C.M., with honours and thesis commended, in 1879. He received the degree of M.D. in 1881. In 1878-79 he was house-physician at Aberdeen Royal Infirmary; in 1879-80 he held a similar appointment in the Northern Hospital, Liverpool; and thereafter, for three years, was a medical officer under the Metropolitan Asylums Board, London, being chiefly engaged at the fever and small-pox hospitals of Homerton, Newcross, ship *Atlas*, and Hampstead. In September, 1883, he went out to Borneo as medical officer to the British North Borneo Company. Dr. Fraser was the author of numerous papers on medical and sanitary subjects, including one on the "State of the Prisons of England, and their Influence on the Diffusion of Small-pox among the English Population in the Eighteenth Century." For this paper he was awarded the Howard medal of 1882 from the London Statistical Society.

ROBERT RATTRAY, M.D., M.R.C.S.

THE death is recorded, at the advanced age of seventy-five, of Dr. Robert G. Rattray, late apothecary and medical superintendent of the Aberdeen Royal Infirmary. Dr. Rattray, who was a native of Aberdeen, went through the course of medical study common at the time in connexion with the university of that city. In 1831 he obtained the diploma of membership of the Royal College of Surgeons of England, and in 1845 took the degree of M.D. at Aberdeen University, being some years subsequently appointed lecturer in Materia Medica in King's College, Aberdeen. He received his appointment as apothecary in connexion with the hospital in 1840, having acted for some time previously as electrician; and in 1849 he was appointed resident medical superintendent, an office which he continued to fill till his retirement, on account of advancing years, in January, 1882, an allowance of £200 a year being then granted him in consideration of his long and faithful service.

CONSIDERABLE regret has been felt in Sheffield among Dr. Banham's medical *confrères* at his departure from that town. He goes to Reading, where he has received appointment as physician to the Royal Berkshire Hospital. This regret found expression in a dinner, which was held on Wednesday, June 17th, and was attended by many of his late colleagues at the Infirmary, Medical School, and Medico-Chirurgical Society, in addition to others from Sheffield and the neighbourhood.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen, having undergone all the necessary examinations, were admitted Licentiates in Dental Surgery at a meeting of the Board of Examiners on the 24th inst.:—

Bardet, Paul Charles Albert, Geneva.
Campion, George Goring, Manchester.
England, Walter Joseph, Southhill-park, *Hampstead.*
Gabriel, William Maurice, Gloucester-gardens.
Goffe, Frank Hampton, Birmingham.
Jones, Alexander John, Maida Vale.
Mackrell, Alfred Sextus, Queen Anne-street.
Mugford, George Henry, Exeter.
Peall, Frederick Snell, Brixton-rise.
Robinson, Arthur Bernard, Liverpool.
Smith, Charles Robert, Leamington.
Williams, Hugh Lloyd, Llanberis, N. Wales.

(Candidates referred, 4.)

UNIVERSITY OF OXFORD.—At a congregation held on the 18th inst. the following degrees were conferred:—

DOCTOR OF MEDICINE.—J. Price, Queen's.

BACHELOR OF MEDICINE.—F. Phillips, Balliol; R. Ward, Exeter; G. Buckmaster, Magdalen; A. Garrod, A. Greswell, A. Orr, Christchurch; L. Guilding, Worcester.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 17th inst. the following degrees were conferred:—

BACHELOR OF MEDICINE.—Samuel Herbert Habershon and Thomas George Styan, Trinity; Patrick Cumin Scott, St. John's; Thomas Ernest Hillier and Frederick Charles Wallis, Gonville and Caius; Sidney Morton Pearson Roberts, Christ's; Edward Waymouth Reid, Cavendish.

BACHELOR OF SURGERY.—Frederick Charles Wallis, Gonville and Caius; Sidney Morton Pearson Roberts, Christ's.

UNIVERSITY OF DURHAM.—At the recent examinations for degrees in Medicine and Surgery the following satisfied the Examiners:—

DOCTOR IN MEDICINE, FOR PRACTITIONERS OF FIFTEEN YEARS' STANDING.

Batchelor, Ferdinand Campion, M.R.C.L., L.R.C.P., L.S.A.
Harris, John Badcock, M.R.C.S., L.R.C.P.
Morris, John Edward, M.R.C.S., L.S.A.
Palmer, F. Stephen, M.R.C.S., L.R.C.P., L.S.A.
Ransford, Gifford, M.R.C.S., L.R.C.P.
Simpson, Reginald Palgrave, M.R.C.S., L.S.A.

DOCTOR IN MEDICINE (Essay).

Eastes, Frederick, M.B., M.R.C.S.
Prowde, Edwin Longstaff, M.B.
Pruen, Septimus Tristram, M.B., M.R.C.S.

MASTER IN SURGERY.

Aslett, G. Stratton, M.R.C.S., L.S.A.
Caleb, Clement Cornelius, M.B., M.R.C.S.
Roberts, James Reid, M.R.C.S., L.R.C.P.
Walker, Charles Pope, M.R.C.S.

BACHELOR IN MEDICINE (Second Examination).

SECOND CLASS HONOURS (in order of merit).

Roberts, James Reid, M.R.C.S., L.R.C.P.
Evers, C. John, M.R.C.S., L.S.A.
Maynard, Frederic Pinsent.
Richardson, James Nowell, M.R.C.S.

PASS LIST (in alphabetical order).

Aslett, G. S., M.R.C.S., L.S.A.
Aubrey, Alfred Reuben.
Boobbyer, P., M.R.C.S., L.S.A.
Bowden, Reginald Treacher, M.R.C.S., L.S.A.
Hall, George Rome.
Hillstead, Herbert J., M.R.C.S., L.S.A.
Hubbard, A. J., M.R.C.S., L.R.C.P.
Jones, John Lloyd Thomas.
Mead, Francis Henry.
Moore, Walter Francis, M.R.C.S.
Palmer, Sydney Joseph, M.R.C.S.
Plummer, H. Beddoes Wetherell.
Proud, Frederick.
Saw, Francis Albert.
Tabor, Charles James.
Walker, Charles Pope, M.R.C.S.

COLLEGE OF PHYSICIANS IN IRELAND.—At the June examinations the undermentioned gentlemen obtained the Licences in Medicine and Midwifery of this College*:—

MEDICINE.—W. E. Dawson, C. Faulkner, G. B. Flanagan, J. H. Foley, F. S. Grimshaw, E. Lambkin, B. Lane, A. J. Luther, J. Norton, D. M. O'Callaghan, M. P. O'Donovan, C. Penott, R. C. Thacker.

MIDWIFERY.—J. Bannon, G. Clarke, J. Moore, S. J. Morr, W. R. Parker, W. Rankin, W. E. Dawson, B. Lane, A. Luther, J. Norton, R. C. Thacker.

* The list given in our last issue was in some respects incomplete.

The following gentleman was admitted a Member:—

Henry Ivers Kirkpatrick.

The undermentioned obtained the Licence of the College at a special examination held on the 23rd inst:—

James Chambers.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—The following gentleman was admitted a Fellow on the 19th inst:—

G. B. White, A.B.

The Council has elected Mr. S. Webb an additional Examiner in Physics, Chemistry, and Medical Jurisprudence.

Society of Apothecaries.—The following gentlemen ssed their examination in the Science and Practice of Medine, and received certificates to practise, on the 18th inst.:—

Cones, J. Archibald, M.R.C.S., St. Bartholomew's Hospital.
Randell, Reginald Maurice Henry, M.R.C.S., Guy's Hospital.

n the same day the following gentlemen passed their amination in the Science and Practice of Medicine, rgery, and Midwifery, and received certificates to practise:

Bollen, Frederick St. John, St. Thomas's Hospital.
Warren, Sydney, St. Thomas's Hospital.

Dr. Joseph Smyth has been elected coroner for orth Kildare.

St. Mary's Hospital.—At a festival dinner in aid f the funds of this charity, which was held on the 24th st., subscriptions amounting to £2200 were announced.

During the week ending the 13th inst. seven aths were registered in Dublin from cerebro-spinal eningitis.

Poisoning by Laudanum.—The Hon. Mrs. Blake, who was on a visit to Viscount Monck, died last week from n overdose of laudanum.

Metropolitan Free Hospital.—The anniversary estival of this hospital was held on the 24th inst., when bscriptions to the amount of £3365 were obtained.

The Austrian Government, it seems, has refused to thorise the establishment of private cremation societies, n the ground that they might encourage crime.

Vaccination Grant.—Mr. John W. Hayward, of the Whitstable district of the Blean Union, has received the Government grant for successful vaccination (second time).

London Fever Hospital.—At a festival dinner in aid of the funds of this hospital, held on the 23rd inst., £517 were subscribed.

The Prince of Wales has accepted an invitation to visit Birmingham in the ensuing autumn, for the purpose of opening the Suburban Hospital, erected at Erdington by Mr. Jaffray of that town.

Bequests and Donations.—The Rev. William Irwin has left £947 to Jervis-street Hospital, Dublin.—The Belfast Royal Hospital has received £100 from Mrs. Esther McKinistry.

At Marlborough on the 20th inst., a man named Clark was remanded on the charge of attempting to poison, by means of oil of almonds, Dr. Burman, of Ramsbury, by whom he had been employed as groom and gardener, and by whom he had been threatened with dismissal.

The annual meeting of the Victoria (Philosophical) Institute took place on the 17th inst., at the house of the Society of Arts, when the address was delivered by Dr. J. Leslie Porter, President of Queen's College, Belfast, the subject being "Egypt, Historical and Geographical."

Earlswood Asylum for Idiots.—The annual report (which is printed by the inmates of the Asylum) has just been issued. During the year 642 patients have been cared for in the institution. The total receipts amounted to £33,643; and after payment of all expenses a sum of £2021 was transferred to the capital account.

Mr. Sydney Turner, coroner for the city of Gloucester, has intimated his intention of resigning his office, owing to his inability, by the Municipal Act of two years ago, to appoint a deputy to hold inquests on persons dying in the Gloucester Infirmary, of which institution Mr. Turner is an honorary surgeon.

Glasgow Obstetrical and Gynæcological Society. At a numerously attended meeting held in the Athenæum, Glasgow, on June 17th, this Society, which has been in process of formation for some time, adopted a provisional set of rules and elected the following office-bearers:—Honorary President: Professor Leishman, M.D. President: W. L. Reid, M.D. Vice-Presidents: Samuel Sloan, M.D.; Abraham Wallace, M.D. Treasurer: Robert Pollock, M.D. Secretary: J. Stuart Nairne, F.F.P.S. Council: G. Halket, M.D.; R. Park, M.D.; Murdoch Cameron, M.D.; J. Turner, M.D.; J. Marshall, M.D.

Presentation.—A very successful course of lectures, conducted by Dr. Rice Oxley, in the Institute, Lower Norwood, was recently brought to a close. The interest taken by the bodies of the district in the work of the class has been very encouraging, the attendance ranging from 140 to 150; and to show their appreciation of Dr. Oxley's lectures, they presented him with a handsome microscope.

Victoria Hospital for Children.—The foundation-stone of a building to serve as a nurses' home and out-patients' department at this institution was recently laid by the Princess Louise. From 1866 to last December there have been treated at the hospital 295,710 out-patients, and 6861 in-patients, of whom 1281 have been sent to the convalescent home at Margate, all being under sixteen years of age.

St. Marylebone General Dispensary.—At the centenary festival dinner of this institution, which was held recently, it was stated that during the past year medical relief had been given to upwards of 4400 persons; and that *in addition upwards of 2000 had availed themselves of a* provident asylum, whereby patients were admitted to the benefits of the dispensary on payment of one shilling per week.

The Pollution of the River Lea.—The special committee appointed by the parishioners of Hackney and Clapton, to consider the subject of the pollution of the Lea, have addressed a letter to the Lea Conservancy Board, in which they beg the Board to use its influence to hasten on the erection of the works already sanctioned by the Local Government Board, so as to secure as effectual a remedy as possible for the existing deplorable condition of the river.

Surgeon J. W. Daniel, of the Dorset Yeomanry, distinguished himself at the Military Tournament now being held at the Agricultural Hall, on the 24th inst., by taking the second prize in the lemon-cutting competition, value £15. Three times in succession he divided both lemons, a by no means easy feat, but at the fourth essay failed, being beaten by Riding-Master Browne, of the Commissariat and Transport Corps. Both received quite an ovation from the audience.

Queen's College, Cork.—The following prizes have been awarded in the Faculty of Medicine:—Practical Anatomy: 1st, J. W. Wolfe; 2nd, John Jackson; 3rd, P. P. Jennings. Certificate, J. V. Ryan. Chemistry: J. W. Wolfe. Zoology and Botany: J. W. Wolfe. The following prizes and certificates have been awarded in the classes of Practical Chemistry and Materia Medica, instead of those formerly awarded, which have been cancelled:—Practical Chemistry: 1st, W. J. O'Meara; 3rd, R. J. Duffin; 4th, E. R. Hennessy. Certificates of Honour: D. J. O'Mahony, M. J. O'Regan, and Francis John Perrott (equal). Materia Medica: 1st, R. J. Duffin; 2nd, Daniel O'Callaghan; 3rd, E. R. Hennesy. Certificate of Honour: John T. Walsh. The exhibition in Practical Midwifery has been obtained by Daniel Lane.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* The Lancet *before 9 o'clock on Thursday Morning at the latest.*

Aldridge, C., M.D., has been appointed Second Honorary Physician to the Plymouth Public Dispensary.

Bailey, William Henry, M.R.C.S., L.S.A.Lond., has been appointed House-Surgeon and Secretary to the Newark Hospital and Dispensary.

Clendinnen, Joseph George, L.R.C.S.I., L.A.H.Dub., has been appointed Medical Officer for the Third Sedgeley District of the Dudley Union, vice Gilbert.

Draper, Jas. William, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Almondbury District of the Huddersfield Union, vice Abbott.

Finegan, Arthur, L.K.Q.C.P.I., Assistant Medical Officer to the County Asylum, Morpeth, has been appointed Medical Superintendent of the County Mayo Asylum, Castlebar, Ireland.

Griffiths, Wm. Charles, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Llanwinio District of the Carmarthen Union.

Hern, William, M.R.C.S., L.D.S., has been appointed Assistant Dental Surgeon to the Dental Hospital of London.

Leigh, William Watkin, L.R.C.P.Ed., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Gellygaer Lower District of the Merthyr Tidfil Union, vice J. Leigh.

MILLER, WILLIAM FRANCIS, M.B., M.R.C.S., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Health Officer for Carisbrook, Victoria.

MORRIS, CHARLES A., M.A., M.B., B.C.Cantab., M.R.C.S., has been appointed Resident Medical Officer to the Liverpool Royal Infirmary.

POTTER, J. H., M.R.C.P., M.R.C.S., has been appointed to act as Police Surgeon and Surgeon to the Coroner of Bombay, during the absence of Dr. Sidney Smith, on leave, or until further orders.

BOYDS, WM. A. S., L.R.C.P., M.R.C.S., L.S.A.Lond., has been appointed Surgeon to the Royal Berkshire Hospital, vice Moxhay, deceased.

STUDDERT, RICHARD CHARLES, M.D., B.Ch.Dub., has been reappointed *Medical Officer of Health for the Erith Urban Sanitary District.*

SWANSTON, CHARLES, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Government Medical Officer for the District of Mudgee, New South Wales.

Births, Marriages, and Deaths.

BIRTHS.

ALLEN.—On the 9th inst., at 41, Wellington-square, Hastings, the wife of Bryan Holme Allen, M.D., of a daughter.

CARTER.—On the 19th inst., at Saville House, Potter-Newton, Leeds, the wife of F. R. Carter, M.R.C.S., of a daughter.

CHILD.—On the 14th inst., at Vernham, New Malden and Coombe, the wife of Edwin Child, M.R.C.S., of a daughter.

HARRIS.—On the 11th inst., at Teignmouth, Devon, the wife of F. W. H. Davie Harris, Army Medical Staff, of a son.

HOAR.—On the 18th inst., at Maidstone, the wife of Charles Edward Hoar, M.D., of a son.

JOHNSTON.—On the 21st inst., at 2, Melbourne-street, Leicester, the wife of William Johnston, M.D., of a son (Frederic William Sinclair).

MACCULLOCH.—On the 19th inst., at The Touillets, Guernsey, the wife of W. Mansell MacCulloch, Esq., M.D., F.G.S., of a daughter.

PIGGOTT.—On the 21st inst., at Brookside, Clare, Suffolk, Frances Mary, wife of Edward A. Piggott, L.R.C.P.Ed., L.R.C.S.Ed., L.S.A.Lond., of a daughter.

SANCTUARY.—On the 15th inst., at Castle-street, Salisbury, the wife of Thos. Sanctuary, M.D., of a daughter.

TURTLE.—On the 19th inst., at The Poplars, Gascoyne-road, South Hackney, the wife of James H. Turtle, M.D., of a son.

MARRIAGES.

BEAUMONT—VOULES.—On the 23rd inst., at All Saints, Margaret-street, London, by the father of the bride, W. M. Beaumont, Esq., M.R.C.S., *of St. James's-square, Bath, to Frances Elizabeth, daughter of the* Rev. F. P. Voules, Rector of Middle Chinnock, Somerset.

COTTELL—MURRAY.—On the 18th inst., at Crouch-hill, by the Rev. A. C. Murphy, D.Lit., Arthur Bowdich Cottell, Surgeon Medical Staff, to Helen Mackintosh, daughter of William M. Murray, Esq., of Brambledown. Indian, China, and Australian papers please copy.

SANGSTER—SHEPHARD.—On the 17th inst., at St. Mary's, Lambeth, by the Hon. and Rev. Canon Pelham, Rector, Charles Sangster, M.R.C.S., of 158, Lambeth-road, S.E., elder son of the late Martin Sangster, of Stockwell, to Elizabeth Jane, only daughter of Mark Shephard, of Roupell-park, Streatham.

SHADWELL — WHITTINGHAM. — On the 17th inst., at Walthamstow, St. Clair B. Shadwell, L.R.C.P.Lond., eldest son of J. B. Shadwell, Esq., I.C.S., of Cherrapoonjee, Bengal, to Marion Alice, second daughter of W. B. Whittingham, Esq., of North View, Walthamstow.

STOKES—HUNT.—On the 20th inst., at St. Pancras Church, Arthur Samuel Stokes, L.R.C.P., M.R.C.S., of Weldon, Northamptonshire, to Helen Matilda, daughter of Hutchinson Hunt, of Caldecott, Rutland.

VOGAN—LEATHERN.—On the 23rd inst., at the Parish Church, Bromley, Kent, James Norman Vogan, F.R.C.S., to Emma Jane, eldest daughter of Lewis Leathern, Esq.

DEATHS.

BENDALL.—*On the 18th inst., at Titchfield-terrace, Regent's-park, N.W.,* Howard Bendall, M.D., M.R.C.S., in his 32nd year.

BREDIN.—On the 23rd inst., at The Vines, Sutton Valence, Kent, Margaret Eliza, the beloved wife of John Noble Bredin, physician.

DANE.—On the 21st inst., suddenly, after a few hours' illness, at his residence, Finchley-road, South Hampstead, Thomas Dane, M.R.C.S., in his 52nd year.

HESLOP.—On the 17th inst., whilst travelling to Braemar, N.B., Thomas Pretious Heslop, M.D., F.R.C.P., of Birmingham.

OATES.—On the 19th inst., at Edinburgh, suddenly, Parkinson Oates, M.D., M.R.C.S., L.S.A.Lond., of Cambridge-street, S.W., and Lansdown-parade, Cheltenham, aged 67.

STACE.—On the 15th inst., at Abu Zatmeh, Soudan, of enteric fever, Arthur Frank Stace, Surgeon Army Medical Staff, grandson of the late Dr. Stace, of Southampton, aged 21.

WILSON.—At Cullen, Banffshire, James Wilson, F.F.P.S.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, June 25th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks a 8.30 a.m.
June 19	29·81	W.	61	59	103	68	55	·08	Cloudy
,, 20	29·51	W.	65	57	109	69	57	·01	Cloudy
,, 21	29·92	N.W.	59	50	107	66	48	·17	Bright
,, 22	30·16	W.	60	55	111	68	51	...	Overcast
,, 23	30·08	W.	61	58	83	72	56	...	Overcast
,, 24	29·91	S.W.	72	61	121	81	60	...	Bright
,, 25	29·98	N.E.	59	57	65	59	57	·13	Overcast

Notes, Short Comments, & Answers t Correspondents.

All communications relating to the editorial business of th journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written o one side only of the paper.

Letters, whether intended for publication or private informa tion, must be authenticated by the names and addresses o their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs shoul be marked.

Letters relating to the publication, sale, and advertisin departments of THE LANCET *to be addressed "To th Publisher."*

THE TREATMENT OF DIPHTHERIA.

DR. ILLINGWORTH writes to complain that by the abstract of his lett on the treatment of diphtheria, which appeared in our last issue, h views are but imperfectly described. He points out that to say l recommends salicylate of soda and ammonia is but to state half of h prescription, for later on in his letter he advises the administration steel and chlorate of potash. In addition, he gave his reasons for pr scribing first the one and then the other, the insertion of which th crowded state of our columns prevented.

M.D.—It is not easy to foretell what view the Local Government Boa would take of the subject with all the facts before them; but probal their reply to both questions would be in the negative.

Anxious Inquirer may refer to THE LANCET of Dec. 27th, 1884, an Feb. 14th and 28th, 1885, for information on the point mentioned.

Dr. Malins (Birmingham).—A notice was already in type when our co respondent's communication arrived.

"THE TITLE OF 'DOCTOR' FOR LONDON MEDICAL STUDENTS."

To the Editor of THE LANCET.

SIR,—In reference to Mr. Wright's letter under the above heading i your last issue, will you kindly allow me to call your correspondent attention to the fact that the regulations of the University of Aberde require a professional curriculum extending over *four*, not six, years f the degree of M.B. and C.M.? If Mr. Wright spent the longer perio in obtaining his degrees, then it was his own fault, and he cannot us the fact as a valid argument. As far as regards the relative cost o living, fees, &c., I am convinced that for most English students a tw years' residence in Aberdeen in lieu of London would mean a con siderable saving, and not a "considerable extra expense."

I am, Sir, yours faithfully,
JAMES TURTON, M.R.C.S.
Brighton, June 22nd, 1885.

Dr. Mackey.—As the controversy is now closed, we think it would b inexpedient to print our correspondent's letter.

Dr. Sinclair (Dundee) will oblige by sending a copy of the pamphlet.

FLUSHING SEWERS WITH SEA-WATER.

To the Editor of THE LANCET.

SIR,—Will some of your readers interested in sanitary matters kind inform me if they have found any ill effects arise from partially flush the public sewers with sea-water? If so, what the ill effects were?

I am, Sir, yours faithfully,
M. O. H.
June 24th, 1885.

JEQUIRITY.

To the Editor of THE LANCET.

SIR,—Perhaps some of your readers would be kind enough to inform me through your columns of the result of treatment of [illegible] ulcer by jequirity, and if it has any power to check the spread of the disease.

I am, Sir, yours obediently,
A YOUNG PRACTITIONER.
June 22nd, 1885.

RESPIRATION IN COMPRESSED AIR.

[illegible] SUCHORSKY states (*Chem. Centr.* quoted in *Journ. Chem. Soc.*) that when compressed air is respired the absolute amount of oxygen inspired and of carbonic anhydride expired is diminished. The rhythm of the respiration remains unchanged. In all cases of mechanical hindrance (bronchitis), restriction of movement of the organs (pleuritis), or reduction of surface (pneumonia), the change of rhythm consists in a partial disappearance of the pause after expiration, and the times of inspiration and expiration become equal. Compressed air acts on the circulation in a twofold manner—on the one side it compresses all the capillaries of the outer surface and of the respiratory organs, causing a more complete emptying of the veins, and on the other side changes the distribution of blood in the system, causing an accumulation in the abdominal organs. The therapeutic action of compressed air may be referred exclusively to its mechanical action on the organism, and to the increase of partial oxygen pressure. The latter produces no perceptible effect on the oxidation process in the body; on the contrary, in pathological cases where respiration is impeded it tends to reduce the absolute amount of oxygen taken up and the carbonic anhydride expelled, as the organism obtains the necessary amount of air with less difficulty, and so the muscular work of the respiratory organs is economised. Consequently the therapeutical application of compressed air cannot be considered as facilitating oxidation and support of the body in sick cases, but as a saving of effort. Nevertheless, it would be erroneous to conclude that compressed air might in these cases be replaced by air rich in oxygen, since the compressed air exerts a series of favourable influences on the sick organism, and especially on the respiratory organs. The pressures employed varied between [illegible] and 1143 mm. of mercury.

J. W. D.—A notice of the death of the late Surgeon J. M. Young appeared in our impression of the 6th inst.

[illegible] E. E. P[illegible].—We cannot depart from our rule.

[illegible].—Messrs. Gallais and Co., Margaret-street, Regent-street.

OSMIC ACID IN NEURALGIA.

To the Editor of THE LANCET.

SIR,—In reference to the annotation in your issue of last week upon Dr. S[illegible]'s list of neuralgic cases treated by Neuber's method, may I be allowed to draw attention to an "ill effect," though slight, that was caused apparently by the osmic acid, in a case I attended about a month ago. The patient had a few weeks previously sprained a little finger, and complained when he consulted me of what he called "neuralgic pains" in the same. Having treated successfully a case of [illegible] two or three months' standing by the injection of a 1-per-cent. solution of osmic acid in *five-minim doses, repeated four or five times at* intervals of three days, I determined to pursue the same course with this one. I only used *four minims*, and in a few minutes the patient was [illegible] to find the pains had gone. The next morning, however, there was a painful and flushed swelling in the situation of the puncture—that is to say, between the extensor and abductor minimi digiti. This lasted for several days, and though the pain never returned in the finger a feeling of numbness in it was complained of, while the point of entrance of the needle smarted occasionally for two or three weeks. I should add that the finger did not belong to the "horny hand of [illegible] and its balance of circulation was probably on that account the more easily upset. Should the amount injected not be somewhat less than five minims in parts richly supplied with nerves? The injection was not repeated.—Yours faithfully,

WM. ASHTON ELLIS.
[illegible] Medical Officer, Western Dispensary, Westminster.
June [illegible], 1885.

HOME FOR EPILEPTICS.

To the Editor of THE LANCET.

SIR,—"M. G. E.," who is anxious to hear of an institution where a child subject to epilepsy will be well cared for, will be glad to hear of [illegible] Asylum, or School, near Maidstone. Let him write for prospectus to Mr. A'Vard. At present he has but a very limited number of boys, but a better place for weak-minded children there cannot well be. The house is *commodious*, the grounds are extensive, [illegible] the management is characterised by great liberality and kindness, and the terms are very moderate. A personal visit has convinced me that many parents with afflicted children would be glad to hear of such a home for them.

I am, Sir, yours faithfully,
[illegible] Heath, June 23rd, 1885. T. J.

A Parent should consult a qualified medical practitioner.

Dr. T[illegible].—The interesting paper will appear in an early number.

DR. TIBBITS MEMORIAL FUND.

To the Editor of THE LANCET.

SIR,—Will you allow me to acknowledge through THE LANCET, with many thanks, a donation of five guineas from J. Mitchell Clarke, Esq., for the benefit of the widow and family of the late Dr. Tibbits of [illegible]. Up to the present date the total amount received through THE LANCET is £[illegible] 5s.

I am, Sir, yours faithfully,
[illegible], June 23rd, 1885. JOHN APPLEYARD.

EXISTENCE OF WARTS AMONGST WORKERS IN CARBOLIC ACID.

To the Editor of THE LANCET.

SIR,—In the report of the meeting of the Academy of Medicine in Ireland (THE LANCET, June 6th, page 1037), I see that Dr. Ball, in his paper on cases of Cutaneous Epithelioma, mentions that "warts were numerous amongst the operatives who are employed in the manufacture *of carbolic acid*."

Last October, after some conversation with one of our travellers in Dublin, Dr. Ball wrote to me for information, to which I *replied as per enclosed* letter; and I am therefore much surprised that after the receipt of my letter such a statement should have been made. Further, I may say that our traveller, whom he saw and to whom he alludes, only worked a few months in the factory, and then was simply employed in our stores, where carbolic acid is neither made nor handled.

The occurrence of warts, even in a tar distillery, is probably not in any way due to handling the tar products, and I am informed by a large tar distiller in Manchester that warts are no more prevalent amongst his *workpeople* than amongst any other class of operatives.

I am, Sir, yours obediently,
Manchester, June 16th, 1885. R. LE NEVE FOSTER.

P.S.—I append an extract from a letter from the manager of the tar works in Dublin to whom Dr. Ball alludes:—"I beg to say, in reply to Dr. Ball's report in THE LANCET, that during the thirteen years that I am over these works only five cases of what Dr. Ball calls 'epithelioma' came under my notice, two of which we treated with caustic soda successfully, another was the man mentioned four years ago, one about six months ago (both these were treated by Dr. Ball), and the man who had the wart on his eyelid (under Dr. Storey's treatment), which latter case I am doubtful if it comes under this category. The man, eighty years of age, was employed at the neigbouring ammonia works, and not here. I believe if the men were a little cleaner, and washed themselves oftener, these cases would not occur. As you will probably conclude yourselves, we make not three, but six principal products—viz., crude naphtha, creasote oil, sublimed naphthaline, carbolic acid, anthracene, and, of course, pitch."

"Manchester, Oct. 8th, 1884.

"DEAR SIR,—In reply to yours of the 6th, our representative is labouring under some misapprehension, as during some nineteen years' connexion with the manufacture of carbolic acid I only know of two cases amongst our workpeople—and we employ over 100 hands—and both of them had warts before they came to us; they were brother and sister, and had previously worked at a blood albumen and catgut works respectively; the man only is in our employ, and the warts have gradually disappeared. The woman has left us some time, and I cannot say whether they improved or not whilst with us. Neither was attended by any medical man. With respect to our representative at Dublin, he was also afflicted with warts before he entered our employ, and as he has not had any inside connexion with the works for the past two years, I think his case can have little or no bearing on the matter.

"If there be anything further in which I can give you any help or information, I shall only be too glad to do so.

"Meanwhile I am, dear Sir, yours very truly,
"C. B. Ball, Esq., M.D., F.R.C.S." "R. LE NEVE FOSTER."

A Subscriber to THE LANCET *of Thirty-five Years.*—We do not think there would be any risk at the distance mentioned.

A REMARKABLE SUPERSTITION.

To the Editor of THE LANCET.

SIR,—In your issue of the 13th inst. there is a note on Hottentot pathology, in which it says that "the uterus is supposed after parturition to have a great tendency to fly upwards, and consequently after the second stage of labour the funis is carefully tied to one of the woman's toes." Now, it is curious that in this part of Ireland, within eight miles of Belfast, the lower orders have the same notion. In all cases when I happened to arrive after the birth of the child I found the funis tied to the woman's leg or thigh, "to prevent the after-birth going up about her heart." My own idea is that it has arisen from cases of post-partum hæmorrhage having taken place with retained placenta and the consequent feeling of fainting. It is remarkable how widespread is the idea. I am, Sir, yours faithfully,

GEORGE ST. GEORGE,
Lisburn, Ireland, June 17th, 1885. Surgeon, co. Antrim Infirmary.

CHAMPAGNE JELLY.

To the Editor of THE LANCET.

SIR,—During the illness of the late Lord Beaconsfield it was reported in the daily papers that he was much benefited by the use of champagne jelly—it being, in fact, the only nutriment he could take. Could any of your readers furnish the recipe for this, as I believe it might prove of service to a lady patient who during a somewhat protracted illness has tried nearly all the "triumphs" of the inventors of invalid foods, &c., and is "tired" of them all?—I am, Sir, your obedient servant,

June 23rd, 1885. PHYSICIAN.

A PRACTICAL SUGGESTION.

To the Editor of THE LANCET.

SIR,—As the General Medical Council seem somewhat perplexed as to what object they can legitimately apply their accumulated and increasing wealth, may I be permitted to suggest that they might very properly present every qualified medical man with a copy of their new Pharmacopœia—if only as a "small token of affection and esteem."

I am, Sir, your obedient servant,
French Hospital, W.C., June 16th, 1885. ALFRED S. GUBB.

Communications not noticed in our present number will receive attention in our next.

Communications, Letters, &c., have been received from — Dr. G. C. Roy, Sooree; Mr. C. E. Paget, London; Dr. McCall Anderson, Glasgow; Professor Latham, Cambridge; Dr. Cruise, Dublin; Mr. Mayo Collier, London; Dr. Totherick, Wolverhampton; Mr. Bellamy, London; Dr. S. West, London; Messrs. Maw, Son, and Thompson, London; Dr. Prosser James, London; Mr. Ogier Ward, Tottenham; Dr. Jagielskie, London; Mr. Clement Lucas, London; Mr. A. E. Browne, Liverpool; Mr. Hormbrook, London; Mr. G. J. Mackesy, Waterford; Mr. C. F. Goode, Brighton; Mr. G. C. Macdonald, London; Mr. Martindale, London; Dr. Savage, London; Dr. G. A. Campbell, Garlands; Messrs. Thompson and Co.; Dr. T. Robinson, London; Mr. Kimpton, London; Mr. Windley, Leicester; Mr. Le Neve Foster; Mr. Sultzberger, Anerley; Mr. Thos. Jackson, New Thornton Heath; Mr. G. St. George, Lisburn; Captain Petril, London; Mr. C. Williams, Port Isaac; Dr. Maunsell, London; Mr. J. W. Downie, Glasgow; Mr. H. W. White, London; Dr. C. S. W. Cobbold, Earlswood; Mr. E. H. Fenwick, London; Mr. S. Phillips, London; Dr. S. West, London; Mr. J. Turton, Brighton; Mr. D. Richardson, Newhaven; Mr. Godfrey, Balham; Mr. Achyutakos, Mysore; Surgeon-Major McKennon, Cawnpore; Mr. Carpenter, London; Mr Rainer, Ipswich; Mr. Laurance, London; Messrs. Richardson and Co., Leicester; Mr. Aylem, Pelham; Mr. Barttan, Broseley; Mr. Monsero, Corunna; Messrs. Burgess and Co., London; Messrs. Abblin and Co., Wood Green; Mr. Higgin, Lancaster; Mr. Bredin; Mr. Sampson, London; Messrs. Beal and Son, Brighton; Messrs. Christy and Co., London; Mr. Cowley; Mr. Hand, Ben Rhydding; Mr. Appleyard, Bradford; Mr. Elkerton, London; Dr. Aveling, London; Dr. C. F. Knight, Dublin; Mr. Stuart Nairne, Glasgow; Dr. Jeffreys, Chesterfield; Dr. Harkin, Dublin; Dr. Nunes-Vais, Florence; Mr. Davies Pryce, Nottingham; Mr. F. R. Fisher, London; Mr. Snowden Smith, St. Austell; Mr. Cantlie, London; Mr. J. McG. Robertson, Glasgow; Mr. G. T. Hough, Upton; Mr. F. J. Gant, London; Messrs. Battle and Co., London; Dr. Gledhill, Manchester; Messrs. Robertson and Scott, Edinburgh; Messrs. Louner and Co., London; Messrs. Rigley Sons, Rochdale; Mr. Hine; Dr. Fraser, Salford; Mr. Avering, Paddington; Mr. Leaver; Mr. Doyle, Norwich; An Undergraduate of Victoria University; L.R.C.S.I.; Fiat Justitia; F. W. T.; Physician; R.; J. S., Manchester; M. O.H.; Leeds; B. D.; H. M. C.; J. S. M.

Letters, *each with enclosure*, are also acknowledged from—Mr. Wikeley; Dr. McCulloch, Jersey; Messrs. Mackay, Edinburgh; Mr. Emerson, Biggleswade; Mr. Woodland; Dr. Whitmarsh, Hounslow; Dr. Wood, Walsall; Dr. Jones, Leith; Mr. Mackenzie, Byapur; Mr. Brailsford, Buxton; Messrs. Ingram and Royle, London; Dr. Taylor, Draycot; Mr. Piggott; Dr. Johnston, Leicester; Mr. Williams; Dr. Griffith, London; Mr. Waters, Tenby; Mr. Coates, Tredegar; Miss Wade, Chorley; Mr. Bowser, London; Mr. Hankes, Liverpool; Mr. Wheeler, Manchester; Dr. Lumpkin, Lagos; Dr. Eberle, Thirsk; Mr. Gitturs, Canning-town; Mr. Bowdidge, Higham Ferris; Mr. Rawlins, Highgate; Mrs. James, St. John's-wood; Mr. Davies, Ruabon; Dr. Latham, Pembridge; Mr. McCarthy, Wellington; Mr. Burgess, Invergordon; J. S., Manchester; B. G. C.; R. A., York; Alpha; A. A.; B. W., Royston; F., Derby; B. H., Abergavenny; Matron, Bury; F. E. M., Oldham; E. G., Stamford-hill; A.; A. F., Liverpool; Pons; E. H., Banbury; B. L.; B. C.; R. H. B., Aberdeen; Alpha, Carnforth; P., Newport; Alpha, Manchester; Dr. F. L. N., Finsbury; Medicus, Tenby; Medicus, Brentford; Kent, Cardiff; A. C., Tyrone; Boniface.

Leicester Advertiser, Carlow Sentinel, Church of England Temperance Chronicle, Liverpool Review, Dundee Advertiser, Belfast Northern Whig, Kimberley Diamond Fields Advertiser, Kimberley Daily Independent, &c., have been received.

Medical Diary for the ensuing Week.

Monday, June 29.

Royal London Ophthalmic Hospital, Moorfields.—Operations, 10.30 A.M., and each day at the same hour.

Royal Westminster Ophthalmic Hospital.—Operations, 1.30 P.M. and each day at the same hour.

St. Mark's Hospital.—Operations, 2 P.M., and on Tuesdays at th same hour.

Hospital for Women, Soho-square.—Operations, 2 P.M., and o Thursday at the same hour.

Metropolitan Free Hospital.—Operations, 2 P.M.

Royal Orthopædic Hospital.—Operations, 2 P.M.

Tuesday, June 30.

Guy's Hospital.—Operations, 1.30 P.M., and on Friday at the same hou Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.

St. Thomas's Hospital.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.

Cancer Hospital, Brompton.—Operations, 2.30 P.M.; Saturday, 2.30 P.

Westminster Hospital.—Operations, 2 P.M.

West London Hospital.—Operations, 2.30 P.M.

Central London Ophthalmic Hospital.—Operations, 2 P.M., and o Friday at the same hour.

Wednesday, July 1.

National Orthopædic Hospital.—Operations, 10 A.M.

Middlesex Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Operations, 1.30 P.M., and on Satu day at the same hour.—Ophthalmic Operations on Tuesdays a Thursdays at 1.30 P.M.

St. Mary's Hospital.—Operations, 1.30 P.M. Skin Departmen 9.30 A.M., on Tuesdays and Fridays.

St. Thomas's Hospital.—Operations, 1.30 P.M., and on Saturday the same hour.

London Hospital.—Operations, 2 P.M., and on Thursday and Saturd at the same hour.

Great Northern Central Hospital.—Operations, 2 P.M.

Samaritan Free Hospital for Women and Children.—Operatio 2.30 P.M.

***University College Hospital.**—Operations, 2 P.M.; Saturday, 2 P.* Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

Royal Free Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 3 to 4 P.M.

Obstetrical Society of London.—8 P.M. Specimens will be sho Dr. Priestley: Notes of a Visit to some of the Lying-in Hospital the North of Europe, and particularly on the Advantages of Antiseptic System in Obstetric Practice.—Dr. Herman: On the S puration of *Pelvic Dermoid Cysts.—Mr. Hine: Case of Obstruc* Labour in which Spontaneous Version followed an unsucces attempt to Deliver by the Crotchet after Craniotomy.

Thursday, July 2.

St. George's Hospital.—Operations, 1 P.M.

St. Bartholomew's Hospital.—Surgical Consultations, 1.30 P.M.

***Charing-cross Hospital.**—Operations, 2 P.M.*

North-West London Hospital.—Operations, 2.30 P.M.

Friday, July 3.

St. George's Hospital.—Ophthalmic Operations, 1.30 P.M.

Royal South London Ophthalmic Hospital.—Operations, 2 P.M.

King's College Hospital.—Operations, 2 P.M.

***Ophthalmological Society of the United Kingdom.**—8 P.M. Li* Specimens.—8.30 P.M. Discussion on the President's paper Reflex Ophthalmitis.—Mr. Anderson Critchett: Case of Extr Retinal Irritability.—Mr. J. B. Lawford: Tubercle of Choro Messrs. Walter Edmunds and J. B. Lawford: Pathological Anat of Optic Neuritis.

Saturday, July 4.

King's College Hospital.—Operations, 1 P.M.

Royal Free Hospital.—Operations, 2 P.M.

Middlesex Hospital.—Operations, 2 P.M.

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